

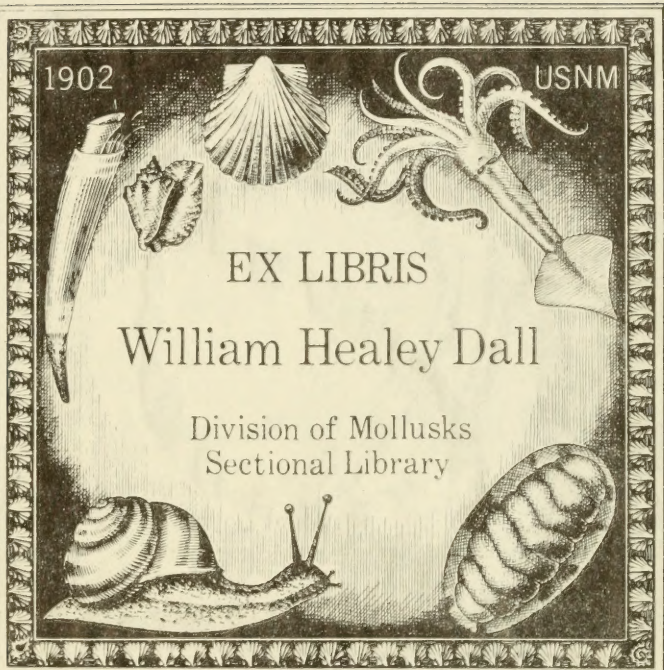
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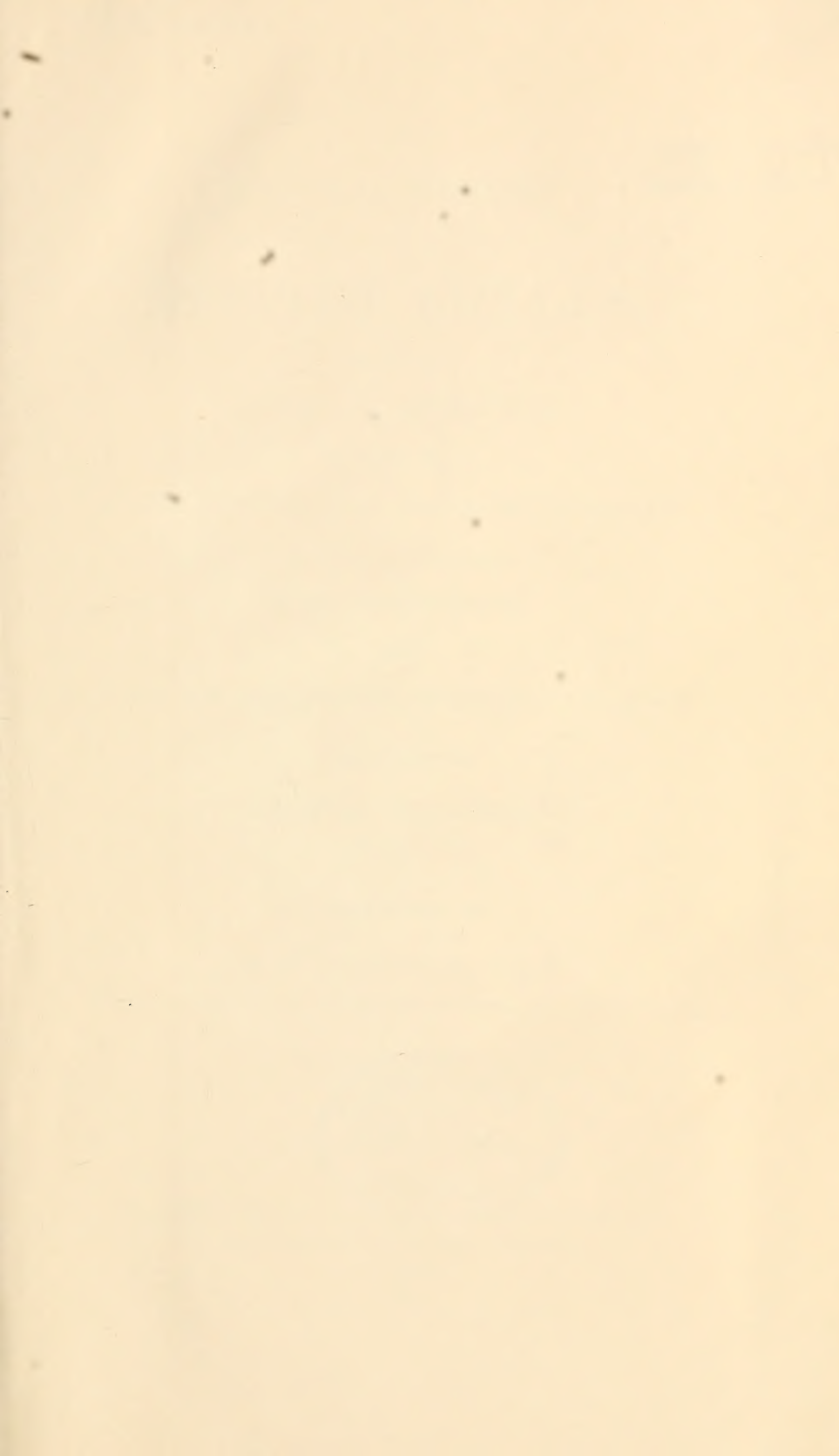


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Mollusks

THE
NATURAL HISTORY
OF
BRITISH SHELLS,

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INCLUDING
FIGURES AND DESCRIPTIONS
OF ALL THE
SPECIES HITHERTO DISCOVERED IN GREAT BRITAIN,
SYSTEMATICALLY ARRANGED
IN THE LINNEAN MANNER,
WITH
SCIENTIFIC AND GENERAL OBSERVATIONS ON EACH.

IN FIVE VOLUMES.
VOL. I.

By ^{dward} E. DONOVAN, F. L. S.

AUTHOR OF THE NATURAL HISTORIES OF BRITISH BIRDS, INSECTS, &c. &c.

LONDON
PRINTED FOR THE AUTHOR,

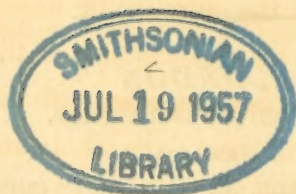
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THE present work is submitted with the utmost deference to the Reader as a general and very copious elucidation of all the larger kinds of Shells found in this country.

At the commencement of this undertaking the Author proposed that the five volumes of which this work consists should include figures and descriptions of all the British Shells; so far at least as they could be correctly ascertained. The amount of these collectively, he was induced to think might be very nearly appreciated from the several works of Lister, Merret, Petiver, Walker, Pennant, and Da Costa: from the number of nondescript British Shells that came into his possession with the original collection of the latter writer, together with those in his own cabinet independent of them; the whole amount of which was far from inconsiderable.

ADVERTISEMENT.

In this estimate, which the Author at first conceived would be completely adequate to every purpose of his design, he afterwards perceived himself in some degree mistaken. During the course of publication he has in various instances been kindly favoured with British Shells not before described: neither are the acquisitions which he has himself discovered in several remote parts of the country altogether unworthy of attention. Many of the species thus obtained were deemed too interesting to be omitted in a work of this nature, and it was therefore thought advisable to exclude those, which, from their extreme minuteness, are usually denominated Microscopic Shells, in order to admit the most important of them. The omission of the more diminutive species, for the sake of inserting Shells of conspicuous figure, that had not been before described as English, the Author trusts will rather be considered as an advantage, than detriment to this work. Nothing of material consequence, either in the collection of the Author, or the cabinets of his friends, to which he has access, has been neglected in this selection; and he could not feel himself completely justified in extending the work beyond the limits originally prescribed for no other purpose than to introduce the Microscopic Shells.

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THE
NATURAL HISTORY
OF
BRITISH SHELLS.

INTRODUCTION.

VERMES.

THIS class of Animals was formerly confounded with Insects and Plants: the *Intestina* and *Mollusca* were referred to the first class: the *Zoophyta* and *Lithophyta* to the latter; and some Authors had even classed the *testacea*, or Shells, as a branch of Mineralogy, without regarding the Animals inhabiting them. Linnæus, in the *Systema Nature*, comprehends the whole of these creatures in the last class of Zoology; and forms their classical character from their internal structure, as in larger and more perfect animals: Cor uniloculare, inauritum; *Sanie* frigida, albida. Tentaculatis *Vermibus*. Heart furnished with one ventricle, without auricle; *sanies* cold and whitish, or colourless. The five orders of the Linnæan class *Vermes* are thus defined:—

INTRODUCTION.

Intestina, simple, naked, destitute of limbs.

Mollusca, simple, naked ; but not without limbs.

Testacea, animal with a calcareous covering.

Lithophyta, animal composite, affixed to, and fabricate a calcareous base.—Coral.

Zoophyta, a vegetating stem like a plant ; animal composite, and resemble flowers.

Linnaeus has included in the *Testacea* Order the whole tribe of Shells. In the generic characters he regards both the Shell and its inhabitant : in the definition of species, the former only is attended to. There are very strong arguments against the method of arranging this tribe by the Animals, although it cannot be denied, that the Shells are only the coverings or habitations, and should not demand our primary attention *.

The TESTACEA are Vermes of the soft and simple kind, and are covered with a calcareous habitation. These are separated into three divisions, according to the number of valves of which the Shell consists. The first division includes only three genera, *Chiton*, *Lepas*, and *Pholus* ; these are called Multivalves, and are formed of many valves, or pieces, disposed transversely on each other. The second division consists of Bivalves, or Shells of two pieces, connected together with a hinge, or cartilage. The third division is of Univalves, and have the Shell complete in one piece, as the word implies. The Linnæan genera are—

* Vide DONOVAN's Instructions for collecting and preserving Subjects of Natural History. London, 1794.

DSI

INTRODUCTION.

Multivalvia.

CHITON.	LEPAS.	PHOLAS.
---------	--------	---------

Bivalvia : conchæ.

MYA.	SOLEN.	TELLINA.
CARDIUM.	MACTRA.	DONAX.
VENUS.	SPONDYLUS.	CHAMA.
ARCA.	OSTREA.	ANOMIA.
MYTILLUS.	PINNA.	

Univalvia.

spira regulari COCHLEAE.

ARGONAUTA.	NAUTILLUS.	CONUS.
CYPRAEA.	BULLA.	VOLUTA.
BUCCINUM.	STROMBUS.	MUREX.
TROCHUS.	TURBO.	HELIX.
NERITA.	HALIOTIS.	

sine spira regulari.

PATELLA.	DENTALIUM.	SERPULA.
TEREDO.	SABELLA.	



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PLATE I.

FIG. I. I. I. I.

OSTREA VARIA.

VARIEGATED, OR ONE-EARED SCALLOP.

GENERIC CHARACTER.

Animal a Tethys. Shell bivalve unequal. The hinge without a tooth, having a small oval cavity.

SPECIFIC CHARACTER

AND

SYNONYMS.

Shell almost equally convex; about thirty rays, scabrous, imbricated, or beset with transverse scales. One ear*.

OSTREA VARIA testa æquali: radiis triginta scabris compressis echinatis uni aurita. *Gmel.—Linn. Syst. Nat.* 3324. 48.

P. subrufus, striis viginti quatuor, ad minimum donatus.—*P. parvus*, ex croceo variegatus, tenuiter admodum striatus, alternis fere striis paulo minoribus. *List. H. Conch.*

Pecten minor nostras, striis plurimis minoribus. *Mus. Petiv. p.* 86.
No. 830.

Pectunculus echinatus fusco purpureus. *Borlase Corn. p.* 277.

* It has two ears, but one is considerably larger than the other.

PLATE I.

Pecten varius : variegated scallop. *Pen. Br. Zool. No. 64. tab. 61.*
fig. 64.

PECTEN MONOTIS : ONE EARED ESCALLOP. *Parvus angustior,*
æqualvis, inæqualiter auritus, strigis echinatis.
Da Costa. Tab. 10. fig. 1. 2. 4. 5. 7. 9.

Many beautiful kinds of this species are found on our coasts. Some are of an uniform, obscure, reddish, or purple colour, without any markings : some are violet, and others bright yellow, or orange. The most elegant kinds are variegated with different colours, as white, red, purple, and brown. The purple kind marbled with irregular spots, and waves of white ; and the coral red, with black and white markings, and white on the upper part, are select specimens of these elegant varieties.

Pennant says, this species is often found in oyster-beds, and dragged up with them. “ It is frequent on most of the shores of England ; as in Wales ; at Margate, and Sheerness, in Kent ; in Sussex and Dorsetshire ; in Devonshire ; at Lelant and Whitsand Bay, &c. in Cornwall ; the ostium of the river Aln in Northumberland, and many other places.” *Da Costa.*

PLATE I.

FIG. II.

PECTEN OBSOLETUS.

GENERIC CHARACTER.

Ostrea. Linn.

SPECIFIC CHARACTER

AND

SYNONYMS.

One large striated ear, with smooth equal shells ; eight *obsolete* rays ; of a dark purple colour. *Penn. Br. Zool. No. 66. tab. 61. fig. 66.*

PECTEN PARVUS : parvus fuscus longitudinaliter striatus, *Da Costa. Br. Conch. 153. 8.*

This is a very rare species ; da Costa received his specimen from Cornwall.

The valves are equal and shallow ; the shell thin, and semitransparent ; the ears unequal, one being very small. The inside is smooth and brown, with a pearly gloss. The outside is a dull purplish brown, with numerous fine longitudinal striæ *, eight or ten of which are more prominent than the rest. These are surely not the *obsolete* rays of Pennant, as da Costa imagines ; the former author must allude to the intermediate rays which are depressed and appear worn, as he describes them.

* The figure in Pennant's work is represented with transverse striæ ; this appears however, to be an error of the engraver.



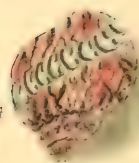
Turbo



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PLATE II.

FIG. I. I.

TURBO CIMEX.

LATTICED WHELKE.

GENERIC CHARACTER.

Animal Limax. Univalve, spiral, or of a taper form. Aperture somewhat compressed, orbicular, entire.

SPECIFIC CHARACTER

AND

SYNONYMS.

Shell oblong-oval. Striæ decussate, or intersect each other in a spiral direction.

TURBO CIMEX, testa oblongo-ovata, striis decussatis: punctis eminentibus. *Lin. Syst. Nat. p. 1233. No. 609.*

Turbo Cancellatus, *Latticed*. Turbo minimus albus cancellatim vel decussatim striatus. *Da Costa Br. Conch. 104. 60. tab. 8. fig. 6. 9.*

The natural size of this shell is shewn at Fig. I. together with its microscopic appearance. It is a very small species, thick, without

PLATE II.

gloss. The striæ are elevated, broad, and cross each other so as to form a deep latticed-work of thick ridges. This species is noted from Cornwall and Guernsey: it is also found in the Mediterranean.

FIG. II. III. IV. VI. V.

TURBO PULLUS.

PAINTED WHELKE.

GENERIC CHARACTER.

Animal Limax. Shell univalve, spiral, or of a taper form. Aperture rather compressed, orbicular, entire.

SPECIFIC CHARACTER

AND

SYNONYMS.

TURBO PULLUS. Turbo testa imperforata ovata lævi, apertura antice diducta. *Linn. Syst. Nat. p. 1233. No. 610.*

Turbo minimus lævis, variegatus, albo rubicundus. Small red and white variegated Whelke. *Borlase Cornw. p. 277.*

Painted, Turbo pictus. Turbo minimus lævis, albo et rubro pèrbelle pictus, *da Costa, p. 103. 59. tab. 8. fig. 1. 3.*

A minute, but elegant species; it is a very delicate shell, thin and transparent, smooth and glossy. The varieties are numerous; gene-

PLATE II.

rally white or blush-rose colour, with the markings crimson or reddish purple, disposed in zones, spiral circles, transverse streaks, irregular waves, lines, spots, and specklings. Some are variegated with different shades of brown in a similar manner.

Fig. II. represents the natural size : Fig. III. a full grown specimen. Fig. IV. IV. IV. are elegant varieties, as they appear under the microscope. Da Costa notes this species from the coast of Cornwall, and from Exmouth in Devonshire.



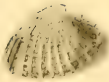
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PLATE III.

FIG. I*. I. I.

PATELLA PELLUCIDA.

BLUE RAYED LIMPET.

GENERIC CHARACTER.

Animal Limax. Shell univalve, subconic, without spires,

SPECIFIC CHARACTER

AND

SYNONYMS.

Shell entire, gibbous, pellucid, marked with longitudinal blue rays.

PATELLA PELLUCIDA: testa integerrima obovato gibba pellucida. radiis quatuor cæruleis. *Gmelin. Lin. Syst. Nat.* 3717. 153.

Patella minima lævis pellucida, aliquot cæruleis lineis eleganter insignita. *List. Hist. Conch. tab.* 543. *fig.* 27.

Patella minor, fusca, tenuis, umbone nigro ad extremitatem anteriorem detruso, tribus inde lineis cæruleis per dorsum decurrentibus pulchre distincta. *Wallace, Orkneys, p.* 41.

Patella Anglica parva, prætenuis cymbuliformis, lineis cæruleis guttatis. *Mus. Petiv. cent.* 8. *p.* 68. *No.* 725.

PLATE III.

Transparent Patella. *Br. Zool.* 4. No. 150. tab. 90. fig. 150.

Patella Lævis. Smooth Patella. *Br. Zool.* No. 151. an old shell.

Patella Cæruleata. Blue rayed. *Da Costa. Br. Conch.* 7. 4. tab. 1.
fig. 5. 6.

Lepas d'eau douce demi-ovoïde transparent, a trois lignes bleues.

D'Avila, tab. 1. p. 428. No. 962.

In the young state, this shell is very transparent and horny, the aperture ovoid, and the margins smooth and level; it has also several longitudinal lines of bright blue colour, which extend from the vertex down the back to the margin. According to Linnæus, these should be four in number; some authors say five, and *Borlase* mentions nine. The blue colour is disposed in spots in some specimens; in others in lines; and again in some others in short and interrupted dashes. Linnæus observes that the bright blue colour has not been found in any Shell except this.

The old shells are very different from the young ones, and have been mistaken by some Authors for distinct species. The young shell is remarkable for its pellucidity. The old ones are thicker and larger: the aperture irregular: the vertex two-thirds of the shell; and the rays of blue, dusky. Fig. I. * represents the natural size.

The Shell is found on the coast of Cornwall, and on the Dorset coast, near Weymouth. *Martin, Sibbald, and Wallace*, received it from the western isles of Scotland and the Orkneys.

PLATE III.

PATELLA FISSURA.

SLIT-LIMPET.

GENERIC CHARACTER.

Animal limax. Shell univalve, subconic, without spires.

SPECIFIC CHARACTER

AND

SYNONYMS.

Oval, striated, reticulated. Vertex recurved, or bent back. A slit in the anterior part.

Patella Fissura : testa ovali striato-reticulata : vertice recurvo, anterieus fissa. *Gmelin, Linn. Syst. Nat.* 3728. 192.

Patella integra parva, alba, cancellata, fissura notabili in margine. *List. H. Conch. tab.* 543.

Petiv. Gaz. tab. 75. fig. 2.

Patella testa sulcato-reticulata, vertice recurvo, margine antice sursum fisso. *Müller-zool-dan.* 1. p. 83. t. 24. f. 7. 9. *rar.* 1. p. 51. *prodr.* 2864.

Patella fissura. Slit. *Br. Zool. t.* 90. f. 152. p. 144.

Da Costa Br. Conch. 11. 5. tab. 1. fig. 4.

Lepas d'eau douce reticulé, avec une petite fente, ou entaille. *D'Avila, Cab.* 1. p. 428. No. 962.

Found on the coasts of Cornwall and Devonshire.





PLATE IV.

STROMBUS PES PELECANI.

CORVORANT'S FOOT.

GENERIC CHARACTER.

Animal a slug. Shell univalve, spiral. The aperture much dilated, and lip expanding into a groove.

SPECIFIC CHARACTER

AND

SYNONYMS.

Lip expanded, divided into four fingers or prongs.

STROMBUS PES PELECANI: testa labro tetradactylo palmato digitis angulato, fauce lævi. *Gmel.—Lin. Syst. Nat.* 3507. 2.

Cochlea testa longa acuminata, aperturæ labro dilatato, duplici stria antice sinuato. *Lin. Fn. Suec.* 1. p. 378. No. 1323.

Aporrhais Quadrifidus. Four-fingered. Aporrhais subfuscus, anfractibus nodosis, labro palmato quadrifido. *Da Costa Br. Conch.* 136. 80. *Tab.* 7. *fig.* 7.

Buccinum bilingue striatum labro propatulo digitato. *Lister H Conch. tab.* 8. 65. *fig.* 20.

Strombus canaliculatus, rostratus, ore labioso, striatus, papillosus, auritus aure admodum crassa, et in quatuor appendices breviores expansa, ex candida cinereus. *Gualt.* 1. *Conch. tab.* 53. *fig.* A.

PLATE IV.

Aporrhais Edinburgicus minor nodoso. Petiv. Gaz. tab. 79. fig. 6.

—tab. 127. fig. 11.

Strombus Pes pelicani, Corvorant's foot. Penn. Br. Zool. No. 94.

tab. 75. fig. 94.

Aile de Chauve Souris femelle, Patte D'Oye, ou Hallebarde. D'Avila

Cab. p. 191. No. 344.

A very singular, but not uncommon shell on some of our coasts, as Cornwall, Devonshire, Durham and Sussex. In Carnarvonshire and Merionethshire, in Wales, on the coast of Scotland, and in the Orkneys.



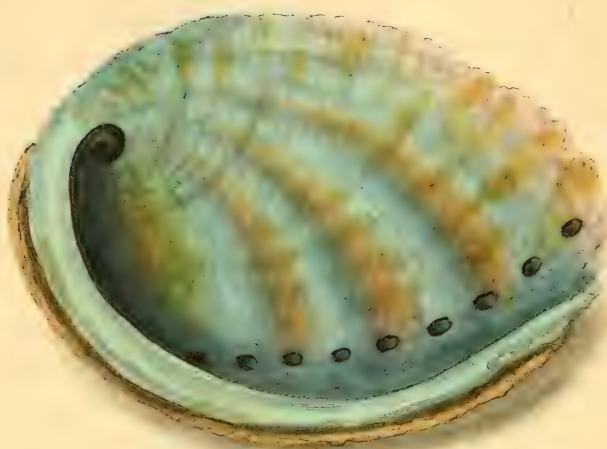


PLATE V.

HALIOTIS TUBERCULATA.

TUBERCULATED SEA EAR.

GENERIC CHARACTER.

Animal a slug. Shell univalve, dilated, or flat, almost open a row of orifices its length, spire near one end turned in.

SPECIFIC CHARACTER

AND

SYNONYMS.

Oblong-oval. Outside furrowed transversely, rugged, tuberculated.

HALIOTIS TUBERCULATA, testa subovata, dorso transversim rugoso tuberculato. *Gmel.—Linn. Syst. Nat. Conch. p. 3687. sp. 2.*

Auris marina, major profunde sulcata, magis depressa, fusco colore obsita, intus argentea. *Gualt. Ind. Conch. tab. 69. fig. 1.*

Auris marina quibusdam: Patelli fera Rondoletii, λεπὰς ἀγεία Aristotelis; Mother of Pearl, Anglice. *List. H. An. Angl. p. 167. tit. 16. tab. 3. fig. 16.*

Tuberculated Sea Ear. *Pennant Br. Zool. No. 144. tab. 88. fig. 144.*

Haliotis Vulgaris. Common Sea Ear. *Da Costa, Br. Conch. p. 15. pl. 2. fig. 1, 2.*

Pennant says this species is frequently cast upon the southern coast of Devonshire. It is common on the eastern coast of Sussex; and on the coast of the isle of Guernsey.—It adheres like limpets, to the rocks, when living.



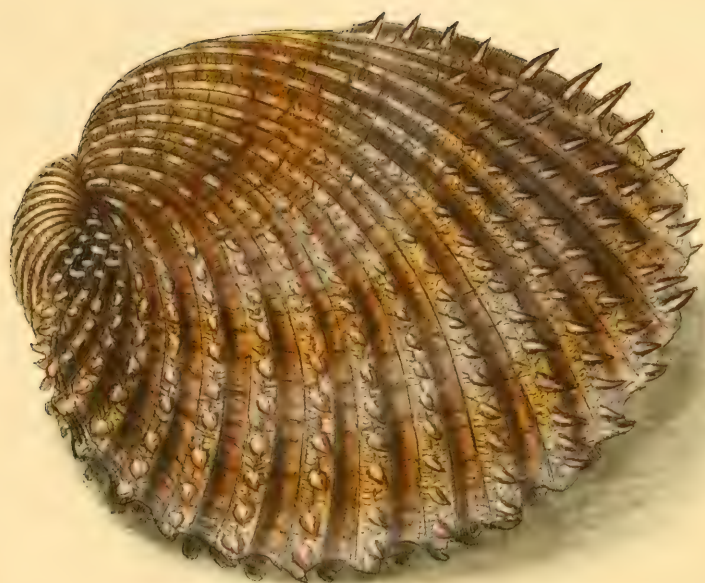


PLATE VI.

CARDIUM ACULEATUM.

SPIKED COCKLE.

GENERIC CHARACTER.

Two teeth near the beak; and another remote one on each side of the shell.

SPECIFIC CHARACTER

AND

SYNONYMS.

Shell nearly heart-shaped. Ribs high, sulcated down the middle, and beset with long canaliculated spines.

CARDIUM ACULEATUM: C. testa subcordata: sulcis convexis linea exaratis: exterius aculeato ciliatis.—*Gmel. Linn. Syst. Conch. p. 3247. 7.*

Pectunculus maximus insigniter echinatus. *Wallace, Orkney. p. 44.*

Cœur de bœuf. *Argenville. Conch. I. p. 335. fig. B.*

Cœur de bœuf Epineux. *D'Avilla Cab. p. 355. No. 817.*

Concha cordiformis æquilatera, umbone cardium unito, striata, striis latis canaliculatis muricata aculeis longis et acutis, aliquando recurvis in summitate striarum positis, albida, et parvis maculis luteis obscure fasciata. *Gualt. I. Conch. tab. 72. fig. A.*

Cardium Aculeatum. Aculeated. *Penn. Br. Zool. 137. tab. 50. fig. 37.*

Cardium Aculeatum, Spiked Cockle, A. *Da Costa, Br. Conch. p. 175.*

PLATE VI.

This is the largest of the Cardium, or Cockle genus, that inhabits any of the British shores. It is noted by Wallace as a Shell of the Orkneys; and also by Pennant, who likewise found it off the Hebrides.—It is a thick shell, with high radiated ribs, and beset with large processes or spines that are hollowed. It is covered with a fibrous epidermis, of a blackish colour, varied with light browns; the colour beneath is white, with a faint tint of red, or rose colour.—Marginal circumference ten inches and an half.

This is one of the six rare species Da Costa could not procure for his work, and to which he alludes in the preface*.

* I have described the shells from the objects themselves, except in *six instances*, where I could not procure the originals to complete the series; in which case I have borrowed them from authors of veracity; and the *Reader* will find those species distinguished by Roman characters.





PLATE VII.

LEPAS ANATIFERA.

ANATIFEROUS ACORN SHELL.

GENERIC CHARACTER.

Animal. triton. Shell of many unequal valves; affixed by a stem.

SPECIFIC CHARACTER

AND

SYNONYMS.

Shell compressed, consists of five parts, affixed to a pedicle, or membranaceous tube.

LEPAS ANATIFERA, testa compressa quinquevalvi lævi pedunculo insidente. *Gmel. Linn. Syst. Nat. Conch. p. 3211. 13.*

Balanus Anatifera compressus quinquevalvis lævis, tubo seu colle membranaceo insidente. *Da Costa, Br. Conch. 253. 72. tab. 18. fig. 3.*

Concha quinquevalvis compressa, tubulo quodam lignis aut algæ marinæ adhærens; animal sui generis multis cirrhis instructum continens, falso dicta anatifera. *Sibbald. Mus. p. 170. No 2.*

Lepas testa compressa basi membrana cylindricea. *Fn. Suec. I. n. 1350.*

Lepas Anatifera cum Tritone. *Stalp. Obs. 2. p. 458. t. 15. Osb. it. 82.*

PLATE VII.

Barnacle Shell, or Concha anatifera. *Merret. Pin. p. 194.*

Balanus Compressa, Flat centre Shell. *Grew. Mus. p. 148.*

Wallace, Orkn. p. 45. fig. 1.—Mus. Petiv. p. 82.

No. 802.

Anatiferous. *Br. Zool. No. 9. tab. 38. fig. 9.*

Concha anatifera marfine læve. *List. II. Conch. tab. 440. fig. 283.*

β Concha anatifera subrotunda Bartholini. *Lister. Conch. t. 439. f. 280.*

γ Tellina cancellifera striis minimis argutissime signata cinerea. *Gualt. testac. t. 106. f. B.*

The Lepas Anatifera is found on the coasts of England and Ireland, but more frequently on that of Scotland. It adheres by means of its branches, or pedicles, to the bottoms of ships, planks, logs, and other substances floating in the water.

This curious marine production consists of many unequal membranous branches, or arms, at the ends of which the Shells are disposed in an irregular manner; the larger clustering with the smaller in groups, and forming bunches of various sizes. The branches are of a fine red; the Shells of a bluish violet. The animal within is a *triton*, and is furnished with many *cirrh*i, or *tentacula*, with which it takes its food. These tentacula are pectinated like feathers, and hang out of the Shells when open. In the sixteenth century they were, in fact, supposed to be feathers, and hence arose the whimsical belief that a barnacle produced a *goose**. Nor was this a vulgar opinion only; it was sanctioned by the grave details of learned naturalists of that time.

* *Vide Anas Albifrons, Plate 102.—Hist. Brit. Birds.*

PLATE VII.

and particularly by *Gerard**, whose observations are generally noticed by authors, in describing this curious species.

* “What our eyes have seen, and hands have touched, we shall declare. There is a small island in *Lancashire* called the *Pile of Foulders*, wherein are found the broken pieces of old and bruised ships, some whereof have been cast thither by shipwreck, and also the trunks and bodies with the branches of old and rotten trees, cast up there likewise; whereon is found a certaine spume, or froth, that in time breedeth unto certaine shells, in shape like those of the muskle, but sharper pointed, and of a whitish colour, wherein is contained a thing in form like a lace of silke finely woven, as it were, together, of a whitish colour; one end whereof is fastened unto the inside of the shell, even as the fish of oysters and muskles are: the other end is made fast unto the belly of a rude masse, or lump, which in time commeth to the shape and form of a bird. When it is perfectly formed, the shell gapeth open, and the first thing that appeareth is the foresaid lace or string; next come the legs of the bird, hanging out, and as it groweth greater it openeth the shell by degrees, till at length it is all come forth, and hangeth onely by the bill: in short space after it commeth to full maturitie, and falleth into the sea, where it gathereth feathers, and groweth to fowle bigger than a Mallard and lesser than a Goose, having blacke legs and bill or beake, and feathers blacke and white, spotted in such manner as is our *Magpie*, called in some places a *Pie-Annet*, which the people of *Lancashire* call by no other name than a *tree Goose*: which place aforesaid, and all those parts adjoyning, do so much abound therewith, that one of the best is bought for three-pence. For the truth hereof, if any doubt, may it please them to repaire unto me, and I shall satisfie them by the testimonie of good witnesses.” Vide GERARD’S HERBAL, p. 1587, 1588.



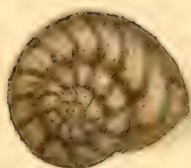


PLATE VIII.

FIG. I.

TROCHUS MAGUS.

TUBERCULATED TOP SHELL.

GENERIC CHARACTER.

Animal a slug. Shell conic. Aperture nearly triangular.

SPECIFIC CHARACTER

AND

SYNONYMS.

Pyramidal somewhat depressed; base umbilicated. The ridges of the spires rising into distinct tubercles.

TROCHUS MAGUS, testa oblique umbilicata: convexa, anfractibus supra obtuse nodulosis.—*Gmel. Linn. Syst. Nat. Conch. p. 3567.*—*Sp. 7.*

Trochus acuminatus, crebris striis transverse et undatim dispositis donatus. The wavy striated trochus, pearl-coloured. *Borlase Cornw. p. 278. tab. 28. fig. 6.*

T. magus tuberculatus. *Penn. Br. Zool. No. 107. tab. 80. fig. 107.*
Sabot sorciere. *Argenville Conch. I. p. 263.*

Trochus pyramidalis umblicatus, anfractibus supra marginatis, infra nodulosis, albus, rubro variegatus. Tuberculatus. *Da Costa. 25. tab. 3. fig. 1. 1.*

PLATE VIII.

This Shell is found on the coasts of Sussex, Dorset, Devonshire, Cornwall, Wales, &c.—It is an elegant species, commonly white, variegated with zig-zag stripes and waves of fine red, as shewn at Fig. 1. Sometimes, however, they are of a dull yellowish tint, instead of white, with the stripes of a dark brown. The Shell is of a rich pearl colour when the outer coat is taken off.

FIG. II. III.

TROCHUS CONULUS.

CONULE.

SPECIFIC CHARACTER

AND

SYNONYMS.

Shell conic, imperforated at the base. A prominent wreath along the spires.

TROCHUS CONULUS, testa imperforata conica, lævi, anfractibus lineis elevata interstinctis. *Linn. Syst. Nat. p. 1230. No. 598.*

Trochus pyramidalis parvus, ruberrimus, fasciis crebris exasperatus.
List. II. Conch. tab. 616. fig. 2.

T. Conulus. Conule. *Penn. Br. Zool. No. 104. tab. 80. fig. 104.*

Trochus Conulus, Conule. *Da Costa, Br. Conch. 21. tab. 2. fig. 4. 4.*

Linnaeus proposes this as a species, (*Conulus*); but at the same time observes, it may be a small variety of the *Trochus Zizyphinus*.

PLATE VIII.

because, like that species, it is imperforated, and has a prominent ridge on the whirls. Pennant says, it is scarcely distinct from *T. Sisyphinus*. Da Costa thinks it certainly a distinct species.

If the shell, Fig. 104. Pennant, is correct, it is of a larger growth than any of our specimens. Da Costa says, the size seldom exceeds that of a cherry kernel. Not uncommon on the shores of Sussex; and has been received from the coast of Devonshire.

Fig. II. natural size. Fig. III. magnified.





PLATE IX.

SERPULA SPIRORBIS.

GENERIC CHARACTER.

Animal a Terebella, or whimble worm. Shell tubular, adheres to other bodies, as shells, stones, &c.

SPECIFIC CHARACTER

AND

SYNONYMS.

Small, orbicular, spiral or wreathed like a cornu ammonis; convex above, flat beneath.

SERPULA SPIRORBIS, testa regulari spirali orbiculata: anfractibus supra introrsum subcanaliculatis sensimque minoribus.—
Gmel. Linn. Syst. Nat. Conch. p. 3740. 5.

Vermiculus exiguus albus nautiloides, algæ fere adnascens. *List. H. Conch. tab. 533.—tab. 553. Huddesford's edition.*

Very small Worm Shells. *Dale, Harw. p. 391. No. 2. and p. 455. No. 2.*

Depressed orbicular Cochleæ on Algæ. *Wallis. Northumb. I. p. 402. No. 41.*

Serpula Spirorbis, Spiral. *Penn. Br. Zool. No. 155. tab. 91. fig. 155.*

Serpula Spirorbis, Spiral, *Vermiculaire Nautiloide.*—parva orbiculata et Spirali, ammoniæ instar convoluta. *Da Costa Br. Conch. 12.—tab. 2. fig. 11.*

PLATE IX.

This species is found in abundance on most of the British shores ; it adheres to shells, stones, claws of lobsters, &c. but chiefly to the leaves of *Fucus serratus*, and other sub-marine plants. It is a strong Shell, white, and without polish ; is never complicated, or laid one on another, but are dispersed singly over whatever substances they are affixed to. Petiver calls it the Wrack Spangle, because it appears like so many white spangles on the dark-coloured leaves of the Wracks.—A piece of this sub-marine plant, with the Shells adhering to it, is a very pleasing object for the opaque microscope.

Fig. I. represents the natural size of the Shells. Fig. II. shews one magnified.

Obs. Dr. Lister, in his original edition, ranked this *Shell* among the *Worm-Shells* (tab. 533. fig. 5.) calling it *Nautiloides*, only from its wreathed form like to a *Nautilus* ; but his re-editor, the Rev. Mr. Huddesford, has been pleased to reverse the Doctor's arrangement, by transposing it to the *Nautilus* family, where it now is (tab. 553), and thereby fixes an error of arrangement on Dr. Lister's memory, which that excellent and accurate conchologist was not guilty of. DA COSTA, page 23.





PLATE X.

PINNA MURICATA.

THORNT WING, OR SEA HAM.

GENERIC CHARACTER.

Hinge without a tooth, and placed on one side. Valves equal; open,
or gape at the bottom.

SPECIFIC CHARACTER

AND

SYNONYMS.

Shell triangular, striated; the striæ beset with acute, ovated, and
concave scales or prickles.

PINNA MURICATA: testa striata, squamis concavis ovatis acutis.

Gmel. Lin. Syst. Nat. Conch. p. 3364. Sp. 4.

Pinna tenuis, striata, muricata. *List. II. Conch. tab. 370. fig. 210.*

Pinna fragilis. Brittle. *Penn. Br. Zool. No. 80. tab. 59. fig. 80.*

Pinna tenuis costis longitudinalibus muricatis. Muricata, Thorny.

Da Costa, tab. 16. fig. 3. p. 240.

Pinna recta transversim et directe striata, et rugosa, striis in summi-
tate aculeis exasperatis, ex fusco rubro nigricans.

Gualt. 1. Conch. tab. 79. fig. D.

Seb. Mus. 3. t. 92. ser. 1. f.

Concha Pinna. *Hasselq. it. 447. n. 137.*

Pinna lata altera. *Rumf. Mus. t. 46. f. M.*

PLATE X.

Dr. Rutty mentions a Pinna ten inches long and five broad, caught near the Skerries, in Ireland; and Mr. Pennant “saw specimens of vast *Pinnae*, found among the farther *Hebrides*, in the collection of Dr. *Walker*, at *Moffat*,” but it is uncertain of what species either of these were: Mr. Pennant says, “they were very rugged on the outside, but cannot recollect whether they were of the kind found in the *Mediterranean* or *West Indies**.”

The only British species of *Pinna* we are acquainted with, is the *P. Muricata* of *Linnaeus*, or *P. Fragilis* of *Pennant*, and that is very rare. The latter author describes it from a specimen in the *PORTLAND* cabinet, which had been fished up at *Weymouth*, in *Dorsetshire*. *Da Costa* says, he has seen a very small one (of the same species) from the coast of *Wales*.—Both of these are represented in the annexed plate.

This Shell is extremely thin and brittle, and gapes open at the broadest end. It is semi-pellucid, and of a horn colour; the outside marked with longitudinal ribs, roughened with rows of small prickles†. The inside is smooth, of a pale horn colour also, with a pearly lustre towards the top.

* This Author, however, arranges it as a new British species, without further description:—as, *Pinna Ingens*—Great Nacre.

† In *Pennant*’s figure these are obsolete.



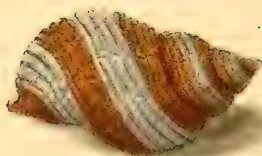
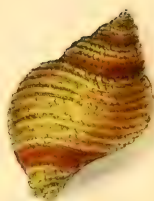


PLATE XI.

BUCCINUM LAPILLUS.

MASSY, OR PURPLE WHELKE.

GENERIC CHARACTER.

Aperture oval, ending in a short canal.

SPECIFIC CHARACTER.

Ovated, terminates in a sharp point, spirally ridged. Pillar lip broad.

BUCCINUM LAPILLUS: testa ovata acuta striata lævi, columella planiuscula.—*Lin. Syst. Nat.* p. 1202. No. 467.

Cochlea testa crassa ovata utrinque producta; spiris quinque spiraliter sulcatis; aperturæ labro undulato. *Faun. Suec.* p. 378. No. 2167.

Buccinum minus, albidum, asperum, intra quinas spiras finitum. *List. H. An. Ang.* p. 158. tit. 5. tab. 3. fig. 3.

Buccinum brevi rostrum supra modum crassum, ventricosius, labro denticulato: *Purpura Anglicana.* *List. H. Conch.* tab. 965. fig. 18.—ET B. brevi rostrum, album denticulo unico ad imam columellam. *Purpura Anglicana.* *Fig.* 19.

Purple marking Whelke. *Borlase Corn.* p. 277. tab. 28. fig. 11.

English purple. *Smith Cork.* p. 318.

Horse wrinkles. *Smith Waterford.* p. 272.

Small purple Whelke. *Wallis Northumb.* p. 401.

Buccinum lapillus, Massy. *Penn. Br. Zool.* 4. No 89. tab. 72. fig. 89.

PLATE · XI.

Buccinum canaliculatum minus, crassum varicolor, striatum, seu
Purpura Anglicana. Purpuro-buccinum. *Da*
Costa Br. Conch. tab. 7 fig. 1. 2. 3. 4. 9. 12.

This is a strong, thick shell, generally about one inch and a half in length, of a full pyramidal shape, with a point acute; it has five spires, furrowed: the ridges of the lower wreath notched, or scaled, and very rough. Within the mouth it has five long parallel teeth.

The colours are various, often of a simple and uniform yellowish brown, sandy, or clay colour; sometimes quite white, or white tinged with violet, and fasciated with yellow or brown; the latter are the most elegant varieties of *B. Lapillus*.—These shells are found in great abundance near low water-mark, on many of the shores of Great-Britain. It is one of the species that yields the purple dye analogous to the *purpura* of the ancients; and though the value of its dye has been long superseded by the cochineal insect, the shells that produced it are objects of curiosity. The Tyrian purple was the most admired, and is known to have been extracted from a species of the *Murex*; but other purples of inferior lustre are also mentioned by the ancients. *Da Costa* imagines that the liquor of this *Whelke* (*Buccinum Lapillus*) was a valuable purple to the ancient English, and quotes the authority of *Bede*, who lived about the seventh century, for this opinion. “There are,” says *Bede*, “snails in very great abundance, from which a scarlet or crimson dye is made, whose elegant redness never fades, either by the heat of the sun, or the injuries of rain, but the older it is, the more elegant*.”

* Sunt cochleæ, satis superque abundantes, quibus tinctura coccinei coloris conficitur. Cujus rubor pulcherrimus nullo unquam solis ardere, nulla valet pluviarum injuria pallescere; sed quo vetustior, eo solet esse venustior.—*Bede, Hist. Eccles.* (edit. opt.) l. i. c. i. p. 277.

PLATE XI.

In 1684, Mr. Cole, of Bristol, described the process of extracting the *purple* of this shell, in the Philosophical Transactions. His account is as follows:

“ The Shells being harder than most of other kinds, are to be broken with a smart stroke with a hammer, on a plate of iron, or firm piece of timber (with their mouths downwards) so as not to crush the body of the fish within; the broken pieces being picked off, there will appear a white vein, lying transversely in a little furrow, or cleft, next to the head of the fish, which must be digged out with the stiff point of a horse-hair pencil, being made short and tapering. The letters, figures, or what else shall be made on the linnen (and perhaps silk too) will presently appear of a pleasant light green colour, and if placed in the sun, will change into the following colours, i. e. if in winter, about noon; if in summer, an hour or two after sun-rising, and so much before setting; for, in the heat of the day in summer, the colours will come on so fast, that the succession of each colour will be scarcely distinguished. Next to the first light green, it will appear of a deep green, and in a few minutes change into a sea-green; after which, in a few minutes more, it will alter into a watchet-blue; from that, in a little time more, it will be of a purplish-red; after which, lying an hour or two, (supposing the sun still shining) it will be of a very deep purple-red, beyond which the sun can do no more.

“ But then the last and most beautiful colour, after washing in scalding water and soap, will (the matter being again put into the sun or wind to dry) be of a fair bright crimson, or near to the prince's colour, which, afterwards, notwithstanding there is no use of any stiptick to bind the colour, will continue the same, if well ordered,

PLATE XI.

as I have found in handkerchiefs that have been washed more than forty times; only it will be somewhat allayed from what it was after the first washing. While the cloth so writ upon lies in the sun, it will yield a very strong and foetid smell, as if garlick and assafoetida were mixed together."





PLATE XII.

OSTREA SUBRUFUS.

GENERIC CHARACTER.

Animal a Tethys. Shell bivalve unequal. The hinge without a tooth, having a small oval cavity.

SPECIFIC CHARACTER

AND

SYNONYMS.

Shell thin. Twenty longitudinal rays, finely striated; ears unequal; colours various; generally red.

PECTEN TENUIS, subrufus, maculosus, circiter viginti striis majoribus, at lævibus, donatus. *List. H. An. Angl.* p. 85. tab. 5. fig. 30.

PECTEN SUBRUFUS. *Penn. Br. Zool. No. 63. tab. 60. fig. 63.*

PECTEN PICTUS: mediocris, fere æquivalvis, tenuis, variis coloribus perbelle variegatus. *Da Costa. Br. Conch. p. 144. sp. 3.*

Pectunculus pennatus striis dense notatus, luteo purpurascens. Pecten altis striis albo purpureis transverse variegatis insignis; & Pectunculus purpurascens vittis albis circularibus variegatus. *Borlase Cornw. p. 277. tab. 28. fig. 18, 21 and 22.*

PLATE XII.

This elegant species is found on several of the shores of Great Britain and Ireland, particularly those of Cornwall, Dorset, and Northumberland. It is generally about two inches and an half in length. Shell thin and rather convex. The inside is smooth and glossy, and commonly white, though sometimes of a brownish colour. The colours of the outside very various and beautiful. Da Costa enumerates the chief varieties, as, 1. *almost white*, and *white* charged with *brown*, *red*, or *purple*; 2. *uniform bright yellow*, and *pale yellow*, with *white*; 3. *uniform brown*, and *brown*, *red*, or *purplish* grounds with *white*, &c. all these colours are elegantly blended and variegated, sometimes marbled or mottled or disposed in *zones*, *girdles*, broad longitudinal rays, &c.

Fig. 1. represents a fine coloured specimen of the variegated red and white kind. Fig. 2. The uniform deep orange, which we apprehend is less common.





PLATE XIII.

HELIX NEMORALIS.

GIRDLED SNAIL.

GENERIC CHARACTER.

Aperture or mouth contracted and lunated.

SPECIFIC CHARACTER

AND

SYNONYMS.

Imperforated, subrotund, thin, pellucid. Mouth semi-lunar; generally girdled with streaks: and of various colours.

HELIX NEMORALIS: testa imperforata subrotunda lævi diaphana fasciata, apertura subrotundo-lunata. *Linn. Faun. Suec.* 2186.—*Gmel. Linn. Syst. Nat. Conch.* p. 3647. 108.

Cochlea citrina aut leucophæa, non raro unicolor, interdum tamen unica, interdum etiam duobus, aut tribus, aut quatuor plerumque vero quinque fasciis pullis distincta. *List. H. An. Angl.* p. 116. tit. 3. tab. 2. fig. 3.

Cochlea imperforata, interdum unicolor, interdum variis fasciis depicta. FASCIATA girdled. *Da Costa, Br. Conch.* p. 76. sp. 41.

Helix Nemoralis, variegated. *Penn. Br. Zool.* No. 131.

PLATE XIII.

Prof. Gmelin, in the last edition of the *Systema Naturæ*, enumerates no less than thirty-one varieties of this beautiful land Shell. Da Costa describes six principal varieties in his *British Conchology* *. Some of the kinds are rare, others extremely common, living in trees, hedges and gardens. It is a widely diffused species being found in every part of Europe as well as Great Britain.

* 1. *Uniform, of a pale citron colour, or yellow of different shades: the mouth finely bordered within and without, with a dark brown, and with a brownish shade or cloud on so much of the body wreath as lies within the mouth, or from the outer lip quite across to the edge of the pillar. Pretty frequent.*

2. *Uniform, of a flesh colour of different shades, with the mouth in like manner bordered with dark brown; and the body wreath also shaded exactly the same as the last. Not very frequent.*

3. *Uniform, of different degrees of brown, with the same circumstances. Common.*

4. *The ground yellow or greenish yellow of different shades, with a regular single spiral girdle, or according to the turn of the wreaths, in the very middle of each wreath, with the brown border round the mouth, and the shade or cloud on the body. Pretty frequent.*

5. *The ground flesh colour of different shades, variegated in like manner with a single girdle, the border round the mouth, and on the body. Not very frequent.*

6. *Many dark-brown spiral girdles on the yellow, flesh, or brownish grounds, sometimes to five girdles at least on the body wreath; sometimes only four. These girdles are of different breadths, some being very narrow, like streaks, others broader, like belts; and others so extremely broad as to cover the parts, and make the ground colour only appear in girdles. They are also not equidistant or regularly set; but the very broad girdles lie most generally on the upper part of the shells. These girdled sorts are the most frequent or common. DA COSTA Br. Conch. p. 78.*



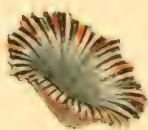
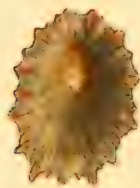
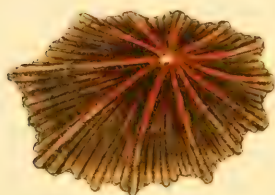


PLATE XIV.

PATELLA VULGATA.

COMMON LIMPET.

GENERIC CHARACTER.

Animal Limax. Shell univalve, subconic, without spires.

SPECIFIC CHARACTER

AND

SYNONYMS.

Oblong ovoid with about fourteen obsolete angles, margins deep or dilated.

PATELLA VULGATA: testa subangulata: angulis quatuor decim
obsoletis margine dilato acuto.—*Gmel. Linn.
Syst. Nat. Conch. p. 3697.—Sp. 23 β
Schroet. n. Litterat 3. p. 62. n. 117 γ
Knorr. Vergn 6. t. 27. f. 8.*

Patella integrā ex livido cinerea, striata. DA COSTA. *Br. Conch.*
p. 3. pl. 1. fig. 1, 2, 8.

Patella ex livido cinerea striata. *List. Hist. Anim. Angl. p. 195.
tit. 40. tab. 5. fig. 40.*

Patella Vulgata, Common. *Penn. Br. Zool. 4. No. 145. tab. 89.
fig. 145.*

Patella integrā. *Klein, Ostracol. p. 115. §. 283. No. 10.*

Lepas *Argenville, p. 21.*

PLATE XIV.

The Limpet is common on all the European shores. The outside is generally encrusted with filth, balani, &c. beneath which, it has an epidermis of a blackish colour. The shells vary exceedingly in colours, not only in the different stages of growth, but also in the adult state. When young, the colours are remarkably vivid and elegantly disposed; the shell flat and the margins deeply crenated: those of full growth are on the contrary very conic and the colours less brilliant. The margins irregular and the ridges more obsolete. Some authors have considered several varieties as distinct species. Da Costa among others, deems the *Patella depressa* of Pennant, no other than a young variety of the common kind.



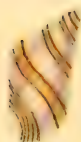


PLATE XV.

BUCCINUM LINEATUM,

LINEATED.

GENERIC CHARACTER.

Whelkes whose mouths are cut short at top, for the gutter or beak does not ascend, but bends and falls on the back, oblique or awry, exactly like the mouth of a soal or flat fish. *Da Costa.*

SPECIFIC CHARACTER.

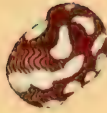
Small, pyramidal, or sharp pointed at bottom. Dark brown, lineated spirally with white.

BUCCINUM LINEATUM: recurvirostrum minimum pullum, lineis albidis spiraliter distinctum. *Da Costa, Br. Conch. p. 130. sp. 77.*

This species is found in great abundance on the coast of Cornwall. The annexed plate exhibits several magnified figures of the most elegant varieties, together with the natural size.

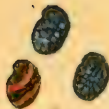
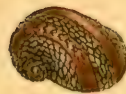
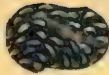


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PLATE XVI.

FIG. I.

NERITA PALLIDULUS.

PALE NERIT.

GENERIC CHARACTER.

Globose. Aperture semiorbicular.

SPECIFIC CHARACTER

Semitransparent. Wreaths rather prominent. Mouth semilunar, very patulous. Umbilicus large.

Nerita Corneus, spira paululum exserta. Pallidulus *Da Costa. p. 51.*
Sp. 29.

Da Costa says "This species is rare, for I have only received some few shells from the coasts of Kent and Dorset." He also considers it an undescribed shell.

PLATE XVI.

FIG. II. II.

NERITA FLUVIATILIS.

RIVER NERIT.

SPECIFIC CHARACTER,

AND

SYNONYMS,

Small, spotted, streaked, and reticulated.

NERITA FLUVIATILIS ; N. testa rugosa labiis edentulis.—*Linn.*

Syst. Nat. p. 125. 3. No. 723.

Nerita parvus fluviatilis, elegantur maculatus, fasciatus, aut reticulatus. Flaviatilis. *Da Costa Br. Conch.*

p. 48. Sp. 27,

Nerita fluviatilis, é cœruleo virescens, maculatus, operculo sub-rufo lunato et aculeato datus. *List. H. An.*

Angl. p. 136. tit. 20. tab. 2. fig. 20.

Nerita fluv. exiguus, recticulate variegatus. Small netted Thames nerit. *Mus. Petiv. p. 67. No. 718.*

Nerita fluviatilis, River. *Penn. Br. Zool. No. 142. tab. 87. fig. 142.*

This species is very frequent in rivers. It is small ; of an ovoid shape, and very elegantly variegated with black, white, red, green, &c.—The star denotes the natural size of the shell.





PLATE XVII.

VENUS CHIONE.

GENERIC CHARACTER.

Bivalve. Hinge furnished with three teeth; two near each other, the third divergent from the beaks.

SPECIFIC CHARACTER

AND

SYNONYMS.

Shell smooth with fine transverse wrinkles, a strong cartilage on one slope, and a long pointed oval depression on the other.

VENUS CHIONE: testa transverse subrugosa lævi, cardinis dente posteriori lanceolato. *Gmel. Linn. Syst. Nat. Conch. p. 3272. sp. 16.*

P. GLABER, SMOOTH Pectunculus major crassus, politus, castaneus, lucide radiatus. *Da Costa. Br. Conch. p. 184. sp. 22.*

Pectunculus maximus crassus, lævis fere radiatus. *Mus. Petiv. p. 86. No. 833.—Curvirostrum. Leigh. Lancashire. tab. 3. fig. 5.*

Venus Chione, β *Rumf. Mus. t. 42. f. G.*

Venus Chinone, γ *Chemn. Conch. 6. t. 33. f. 334.*

“ This species,” says Da Costa, “ is rare in England. I found it at Mount’s Bay in Cornwall, where the fishermen told me they call

PLATE XVII.

it *Queen Fish* ; it is also found near *Fowey* and other shores of that county. I have seen some from *Weymouth*, and Mr. Petiver received it from the island of Purbeck, in Dorsetshire. Dr. Leigh mentions that it is got on the coasts of Cheshire."

Pennant has not noticed this Shell. Linnæus described it as an Asiatic species in the *Systema Naturæ*, but adds it is perhaps an European species also. In the last edition by Gmelin, it stands expressly as a British Shell. *Habitat in Mari Britannico, &c.*

This Shell is thick, strong and heavy: the outside smooth and glossy, with numerous concentric transverse wrinkles, and several faint rays in a longitudinal direction. The margins are plain. The inside milk white and glossy.



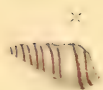


PLATE XVIII.

TURBO FASCIATUS.

FASCIATED.

GENERIC CHARACTER.

Animal Limax. Univalve, spiral, or of a taper form. Aperture somewhat compressed, orbicular, entire.

SPECIFIC CHARACTER

AND

SYNONYMS.

Six spires. White marbled or fasciated with black.

TURBO FASCIATUS. Fasciated. *Penn. Br. Zool. No. 119. tab. 82. fig. 119.*

Buccinum exiguum fasciatum et radiatum. *List. II. Conch. tab. 19. fig. 4.*

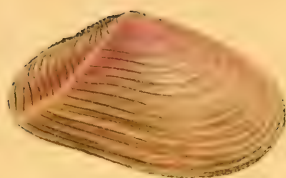
This is one of the six species Da Costa marks with a roman letter, because he could not procure the originals to figure and describe in the British Conchology. It is figured in the British Zoology of Pennant, who says it is very frequent in *Anglesea*, in sandy soils near the coast.







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PLATE XIX.

FIG. I. I.

TELLINA BIMACULATA.

DOUBLE SPOT TELLEN.

GENERIC CHARACTER.

The hinge usually furnished with three teeth. Shell generally sloping on one side.

SPECIFIC CHARACTER.

AND

SYNONYMS.

Subrotundand somewhat triangular, smooth and whitish. Two oblong sanguineous red spots on the inside.

TELLINA BIMACULATA : testa triangulo-subrotunda latiore lævi albida : intus maculis duabus sanguineis oblongis. *Linn. F. Succ.* 11. *No.* 2135.—*S. N. p.* 1120.

T. minima lævis alba, intus maculis duabus sanguineis oblongis notata. *Binaculata. Da Costa. Br. Conch. p.* 213. 45.

This singular species is found on the shores of Lancashire and Hampshire.

PLATE XIX.

FIG. II. II.

TELLINA TENUIS.

THIN TELLEN:

SPECIFIC CHARACTER

AND

SYNONYMS.

Thin. Subrotund, glossy ;—colour sometimes red

TELLINA PLANATA: Concha testa subrotunda glabra incarnata.

Linn. F. Suec. 1. p. 381. No. 1335.

Tellina testa-ovata compressa, transversim substriata lævi: marginibus acutis, &c. *S. N. p. 1117. No. 52.*

Tellina valde tenuis, parva, subrotunda, plerumque rubra. Tenuis
Thin. *Da Costa. Br. Conch. p. 210. Sp. 43.*

Tellina parva, intus rubra, ad alterum latus sinuosa. *List. Conch. tab. 405. fig. 250.*

Tellina lævis intus et extra rubra, ad latus sinuosa. *Ib. fig. 251.*

Tellina planata. *Plain. Penn. Br. Zool. No. 29. tab. 48. fig. 29.*

Found on many of our shores, as Kent, Essex, Cornwall, &c. Some of the varieties are extremely delicate, and prettily streaked with pale red and white: many are entirely white, or white tinged with yellow. Some are orange colour; but the rarest kind is deep violet or purple.





PLATE XX.

FIG. I. I.

NERITA GLAUCINA.

CHAIN NERIT.

GENERIC CHARACTER.

Globose. Aperture semiorbicular.

SPECIFIC CHARACTER

AND

SYNONYMS.

Umbilicated, glossy. Spires swelled, obtuse. Umbilicus large and deep with the inner lip greatly spread on the body wreath. A chain of short brown marks along the spires.

NERITA GLAUCINA: testa umbilicata lævi, spira obtusiuscula, umbilico semiclauso: labio gibbo dicolore. *Lin.*
Syst. Nat. p. 1251. No. 716.

Nerita Glaucina. Livid. *Penn. Br. Zool. No.* 141. *tab.* 87.
fig. 141.

Cochlea Catena. Chain Nerit. C. Umbilicata albo rufescens fasciis maculatis, maxime ad imos orbes distincta. *Da Costa, Br. Conch.* p. 83. *sp.* 45.

This Shell is not uncommon on the shores of the Essex and Kentish coasts; on the sandy shores of Lincolnshire, Dorsetshire, Devonshire,

PLATE XX.

Cornwall, &c. The same species is found in the Mediterranean and the West Indies. The colours are very fine, particularly in the young Shells.

FIG. II. II.

NERITA LITTORALIS.

SPECIFIC CHARACTER

AND

SYNONYMS.

Shell thick, smooth vertex flat. Inner lip spread obliquely.

NERITA LITTORALIS; T. testa lævi, vertice carioso, labiis edentulis.

Lin. Syst. Nat. p. 1253. No. 724.

Nerita vulgaris, unicolor, flavus aurantiacus, vel fuscus, aut fasciatus, aut reticulatim variegatus. Littoralis.

Da Costa, Br. Conch. p. 50. sp. 28.

List. H. Conch. tab. 697, fig. 39.

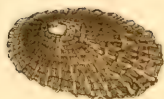
Nerita Littoralis. Strand. *Pen Br. Zool. No. 143. tab. 87. fig. 143.*

This Shell is very common on all the British coasts, particularly the fine yellow kinds. Those with broad bands or girdles, and also such as are reticulated with dark greenish colour on a light ground, are rare varieties of this species.

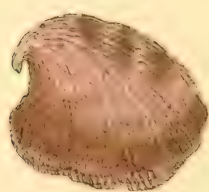




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PLATE XXI.

PATELLA HUNGARICA.

LARGE FOOL'S CAP.

GENERIC CHARACTER.

Animal Līmax. Shell univalve, subconic, without spires.

SPECIFIC CHARACTER

AND

SYNONYMS.

Shell entire, conic, acuminate, striated, with the vertex turning down,
or hanging over one side.

PATELLA HUNGARICA: testa integra conico acuminata striata vertice
hamoso revoluto. *Linn. Syst. Nat. p. 1259.*
No. 761.

PATELLA HUNGARICA. Bonnet. *Penn. Br. Zool. No. 147. tab.*
90. fig. 147.

Patella integra, albescens, striata, vertice spirali, intus rosacea. *Da*
Costa, Br. Conch. p. 12. sp. 6.

Lepas Bonnet de Dragon. *D'Avila, Cab. I. p. 86. 87. No. 32. 34.*

“ This species is only found on the *Cornish* coast, and even is very scarce there, being most generally dredged some miles from the shore; for the Shell is so thin, that it will hardly bear rolling from its native spot to the beach. It is generally found affixed to a species of *escallops*, called *frills*, in Cornwall.” *Da Costa.*

PLATE XXI.

FIG. II. II.

PATELLA PARVA.

SMALL LIMPET.

SPECIFIC CHARACTER.

Shell small, entire, without gloss, whitish, faintly rayed with red.

PATELLA PARVA: integra, parva, sublævis, albescens radiis rubentibus. *Da Costa Br. Conch. p. 7. sp. 3.*

Da Costa considers this as a nondescript species; he received several specimens of it from the coasts of Dorsetshire, but never from any other of the British shores, and therefore proposes it as a scarce Shell.

It is rather larger than a pea, thin, and semipellucid; of a depressed conic shape, and the vertex inclining very much to one side. The inside is whitish, outside the same, with a few longitudinal rays of pale red, or purplish brown.

PLATE XXI.

FIG. III. III.

PATELLA RETICULATA.

RETICULATED MASK LIMPET.

SPECIFIC CHARACTER

AND

SYNONYMS.

Small, ash colour, reticulated. Vertex perforated.

P. LARVA RETICULATA. *Patella parva cinerea*, vertice perforata.
Da Costa Br. Conch. p. 14. sp. 7.

PATELLA GRÆCA. STRIATED. *Penn. Br. Zool. No. 153. tab.*
89. fig. 153.

PATELLA CLATHRATA. *Klein. Ostrac. p. 116.—284. No. 2.*
List. H. Conch. tab. 527. fig. 2.?

Pennant says, this species inhabits the west of England. The specimens in Da Costa's collection were also fished up near Weymouth, in Dorsetshire. This is a rare Shell, and is not known to inhabit any other of the British coasts.

This Shell is about three quarters of an inch in length, half an inch in breadth, and one quarter of an inch in heighth. The outside is deeply reticulated, or wrought with prominent longitudinal and transverse ridges. The vertex inclines to one end, and is perforated; its aperture is of an oblong form, and about one tenth of an inch in length.





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PLATE XXII.

FIG. I. I.

TURBO CINCTUS.

GIRDLED WREATH SHELL.

GENERIC CHARACTER.

Animal Limax. Univalve, spiral, or of a taper form. Aperture somewhat compressed, orbicular, entire.

SPECIFIC CHARACTER

AND

SYNONYMS.

Whitish, variegated with brown. Spires swelled and ridged: two particularly large, broad, roundish ridges, in the middle of each spire.

TURBO CINCTUS: strombiformis medius albus pullo variegatus, anfractibus porcis tumidis latis & spirabilibus cinctus. *Da Costa Brit. Conch. p. 114. sp. 66.*
Tab. 7. fig. 8.

Turbo Exoletus. *Linn. Syst. Nat. ?*

This is a very rare Shell. Da Costa says he has received it only from the coasts of Lincolnshire and Lancashire.

PLATE XXII.

FIG. II. II. II.

TURBO TEREBRA.

AUGER SHELL.

SPECIFIC CHARACTER

AND

SYNONYMS.

Shell slender. Spires twelve, striated spirally. Six of the *striae* rather prominent.

TURBO TEREBRA: testa turrita anfractibus carinis sex acutis.
Gmel. Linn. Syst. Nat. Conch. p. 3608.
sp. 81.

Cochlea testa longa subulata, spiris, duodecim striatis. *Linn. Faun.*
Suec. 1. p. 378. No. 1322. 2. No. 2171.

Buccinum tenue, dense striatum, duodecim minimum spiris donatum.
List. H. An Angl. p. 161. tit. tab. 3. fig. 8.

Strombiformis medius albus rufo variegatus, anfractibus striatis. *Terebra.*
Da Costa Brit. Conch. p. 112. sp. 65.

Turbo Terebra. Auger. *Penn. Br. Zool. No. 113. tab. 81. fig.*
113.

The colours in this species vary exceedingly; the ground colour is generally white, or cream colour, with the streaks, dots, and markings of brown, pale red, or orange. The length is from one inch and an half to two inches or more.

PLATE XXII.

It is not uncommon on many of the British coasts*. Adanson has a variety of it (β) from Senegal; and other authors mention the same species as a native of the East Indian and African seas.

* This species is not uncommon on many of our coasts, and in great plenty on some, as at the *Scilly Islands*; at *Liverpool*, where they are called Cockspurs; at *Scarborough*, after winter storms, according to Lister; at *Exmouth*, and other places on the western shores; and I have received very fine and perfect ones from the coasts of Wales, as *Flintshire*, *Powbely* in *Carnarvonshire*, and *Barmouth* in *Merionethshire*. It is also a Shell of the Orkneys. *Da Costa*.





PLATE XXIII.

MYTILUS MODIOLUS.

GREAT MUSCLE.

GENERIC CHARACTER.

The hinge toothless, and consists of a longitudinal furrow.

SPECIFIC CHARACTER.

AND

SYNONYMS.

Shell large, blackish: one side angulated near the middle, the other straight; but gibbous towards the beaks, and blunted or obtuse at the upper end.

MYTILUS MODIOLUS: testa lævi, margine anteriore carinato, natibus gibbis, cardine sublaterali.—*Gmel. Linn. Syst. Nat. Conch. p. 3354. Sp. 14.*

Mytilus magnus nigrescens. Modiolus. *Da Costa. Br. Conch. p. 219. sp. 49. tab. 15. fig. 5.*

Musculus papuanus authorum. *Rumph. Mus. tab. 46. fig. B.*

M. Modiolus, Great Muscle. *Penn. Br. Zool. p. 113. 77. tab. 46. fig. 77.*

Musculus papaunus. *Adans. Seneg. i. t. 22. f. C.*
List. H. Conch. tab. 359. fig. 198.
Gualt. test. t. 91. H. L.
Rumph. Mus. t. 46. f. B. C? D?

PLATE XXIII.

Mytilus Modiolus is the largest species of this genus that inhabits the British shores ; being from six to seven inches in length, and three in breadth. It is a strong and heavy shell ; the outside is of a blackish colour inclining to purple. It is covered with a thin filmy brown epidermis, and often with balani and other remains of crustaceous animals. Within, it is smooth and pearly, and sometimes richly coloured with a variety of vivid hues, in which red, purple and green chiefly predominate. These shells lie only in deep waters, and are never cast upon shore ; but sometimes they seize the bait of the ground lines, and are hauled up by the fishermen.

Da Costa received the *M. Modiolus*, of a small size, from the Margate flats in Kent ; from Cornwall and other English shores. The specimen figured in the annexed Plate is from Scarborough in Yorkshire ; those found on the coast of Wales and Scotland, and particularly the Orkneys, are not inferior in point of size to those from Scarborough.



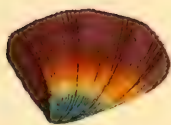
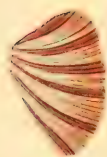
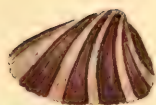


PLATE XXIV.

DONAX CRENULATA.

PURPLE OR TRUNCATED PURR.

GENERIC CHARACTER.

Bivalve. One side very obtuse, margin crenated. Hinge various, generally of two teeth.

SPECIFIC CHARACTER

AND

SYNONYMS.

One side very blunt or truncated: thickly striated longitudinally.
Margin serrated.

DONAX RUGOSA: testa antice rugosa gibba, marginibus crenatis.
Linn. Syst. Nat. p. 1127. No. 104. Mus. reg. p. 494. No. 50.

DONAX DENTICULATA: testa anterie obtusissima: labiis transverse rugosis, margine denticulato, nymphis dentiformibus. *Gmel. Linn. Syst. Nat. Conch. p. 3263. sp. 6.*

Cuneus ex albo & violaceo radiatus, intus vero violaceus, latere altero gibbo & truncato. TRUNCATUS. Truncated
Purr. Da Costa, Br. Conch. p. 205. sp. 40.

Tellina intus ex viola purpurascens, in ambitu serrata. *List. Hist. An. Angl. p. 190. tit. 35. tab. 5. fig. 35.*

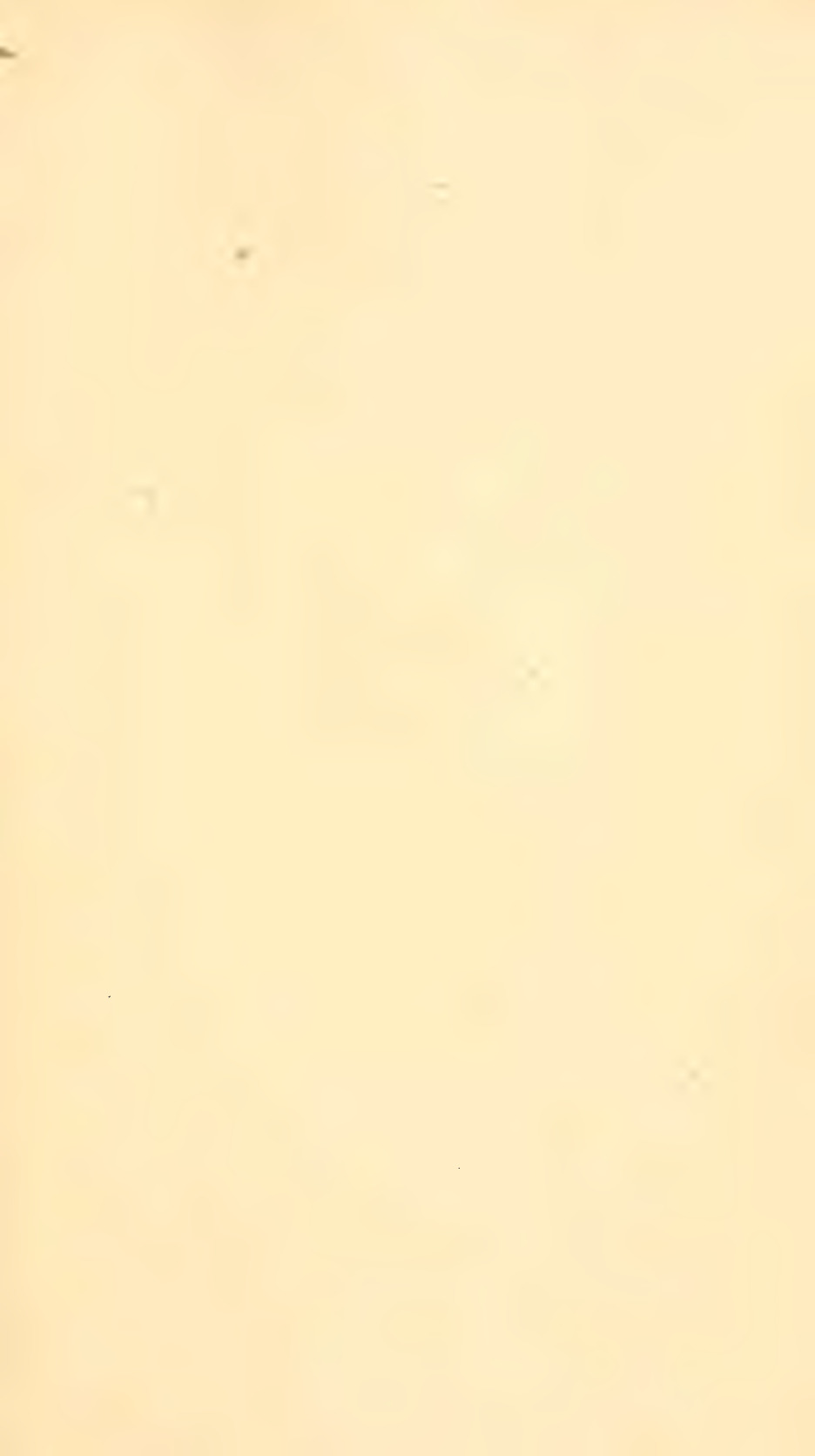
PLATE XXIV.

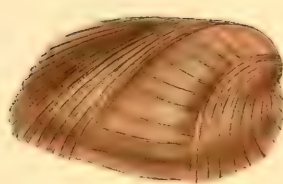
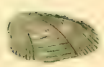
Tellina crassa, admodum leviter striata, intus violacea. *List. II.*

Conch. tab. 375. *fig.* 216.—376.—218. 219.

DONAX DENTICULATA. Purple. *Penn. Br. Zool. No.* 46.

This is a very elegant and remarkable species: the annexed Plate exhibits five of its most singular varieties. The young shells are sometimes quite white, or white faintly marked with brown, red or violet; the old shells are of a deep violet without, and variously marked with the same on the outside. Very common on the western coasts of England, and also on those of Ireland and Scotland.





2



PLATE XXV.

FIG. I. I.

MYTILUS DISCORS,

DIVIDED MUSCLE.

GENERIC CHARACTER.

The hinge toothless, and consists of a longitudinal furrow.

SPECIFIC CHARACTER.

AND

SYNONYMS.

Shell oval, somewhat diaphanous and horny. Outside divided into three compartments ; the two exterior striated longitudinally ; the middle transversely, with extremely fine striæ.

MYTILLUS DISCORS : testa ovali cornea subdiaphana, antice longitudinaliter posterius transversaliter striata.—

Gmel. Linn. Syst. Nat. Conch. p. 3356.

sp. 21.

Mytillus minor tenuis areis tribus distinctus. Discors. *Da Costa,*

Br. Conch. p. 221. sp. 51.

The discovery of this rare species on our coast, is ascribed by Da Costa to Dr. Richard Pultney, F. R. S. of Blandford in Dorsetshire ; he found it on an *ascidia* at Weymouth in that county. It

PLATE XXV.

has also been met with in Greenland, Iceland, and Norway ; and is likewise noted as a native of the Southern Ocean *.

The shell found on the British coast is very small, brittle, and semi-transparent. The outside is of a brownish or rosy colour, tinged with green. The inside smooth, glossy, and somewhat pearly.

* *Gmelin*.—Probably this variety found in the South Seas is that which *Da Costa* notices in his description of *Mytilus discors*. “All that *Linneé* has seen,” (of *Mytilus discors*) “as well as all those found on our coasts, are very small, thin, and delicate; but a kind no wise different, except in *size* and *colour*, being larger than a great walnut, and quite brown, was brought from the southern hemisphere by that great and national honor, Capt. Cook, the circumnavigator, in the late expedition for the discoveries of new countries. These also were entirely *unknown* to all our collectors; and, as they only differ in *size*, *thickness*, and *colour*, but are exactly the same in structure, way of life, and other particulars as these of our coasts, is it a *distinct species* or *variety* only?”—As a figure of this very analogous kind may be acceptable, it is introduced in the annexed Plate at fig. 2.



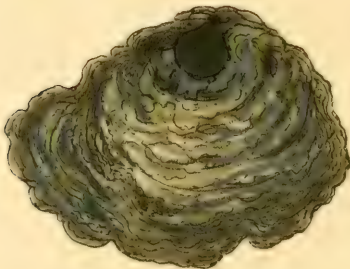
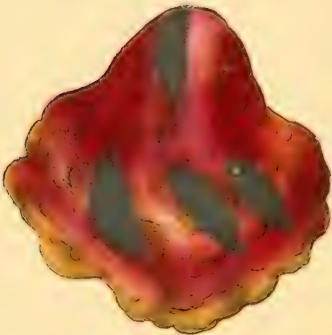
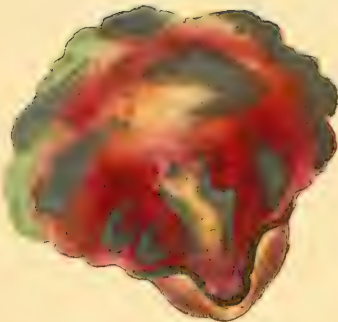
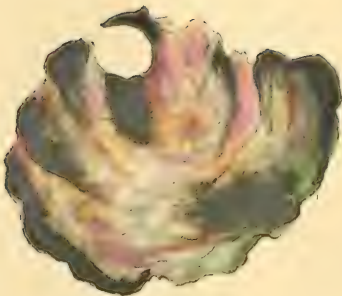


PLATE XXVI.

ANOMIA EPHIPPIMUM.

LARGER OR ONION-PEEL ANOMIA.

GENERIC CHARACTER.

Bivalve. Valves unequal: one gibbous towards the beak, the other flat, and perforated near the hinge.

SPECIFIC CHARACTER

AND

SYNONYMS.

Roundish: pellucid, much wrinkled. Flat valve perforated.

ANOMIA EPHIPPIMUM: testa suborbiculata rugosa plicata planiore perforata. *Gmel. Lin. Syst. Nat. Conch.* p. 3340. *sp.* 3.

Anomia. Subrotunda plicata pellucida levis, valva planiore perforata. Tunica cepæ. *Da Costa. Br. Conch.* p. 165. *tab.* 11. *fig.* 3.

Huitre. Pelure d'oignon. *Angerv. Conch.* 2. p. 316. *tab.* 22. *fig.* C. 11. p. 277. *tab.* 19. *fig.* C.

The perforated Oyster. *Petiv. Mus.* p. 85. No. 823.

Anomia Ephippium, larger. *Penn. Brit. Zool.* No. 70. *tab.* 62.

PLATE XXVI.

The *Anomia Ephippium* is frequently found on the common oyster, to the shell of which it adheres by means of a strong tendinous ligature, which passes through the perforation of the upper valve. This Shell is of an irregular form ; the outside rugged and filmy ; the inside smooth, pearly, and glowing with a variety of elegant tints. In different specimens the colours vary considerably, some being of a rich purple, others pale red, brown, or deep yellow, and all with a silvery hue.





PLATE XXVII.

BULLA LIGNARIA.

WOOD DIPPER.

GENERIC CHARACTER.

Shell sub-oval. Aperture oblong, very patulous, and smooth or even. One end rather convoluted.

SPECIFIC CHARACTER

AND

SYNONYMS.

Oblong, oval, narrow towards one end, and somewhat umbilicated, (or rather convoluted). Striated transversely.

BULLA LIGNARIA: testa obovata oblongiuscula transverse striata, vertice subumbilicato. *Linn. Syst. Nat.*

BULLA LIGNARIA major, leviter et dense transverse striata. *Da Costa. Br. Conch. p. 26. sp. 14. tab. 1. fig. 9.*

Concha veneris major, leviter et dense striata. *List. H. Conch. tab. 714. fig. 71.*

Bulla lignaria. Wood. *Penn. Brit. Zool. No. 83. tab. 70. fig. 83.*

Oublie, ou papier roulé, tonne a bouche entiere. *D'Avila. Cab. p. 206, No. 387.*

This species is not very common. It is found on the coasts of Cornwall, Devonshire, and Dorsetshire, and also on several of the coasts of Ireland.

PLATE XXVII.

The length is generally from one inch and an half to two inches ; the shell is brittle and without gloss, of a light, brownish colour, wrought transversely, with fine striæ, and many narrow whitish veins. Its Latin and English names are derived from its supposed resemblance to a piece of veined wood.

This Shell is very open ; its animal a slug.



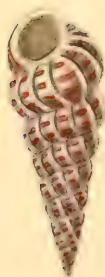


PLATE XXVIII.

TURBO CLATHRATUS.

BARRED OR FALSE WENTLETRAP.

GENERIC CHARACTER.

Animal Limax. Univalve. spiral, or of a taper form. Aperture somewhat compressed, orbicular, entire.

SPECIFIC CHARACTER

AND

SYNONYMS.

Shell taper, without umbilicus. Spires swelled and separated by a deep channel. Several regular elevated ribs or ridges extend in a longitudinal direction from the aperture to the apex.

TURBO CLATHRATUS: testa turrata ex umbilicata: anfractibus contignis lævibus. *Gmel. Lin. Syst. Nat. Conch. p. 3603. sp. 63.—Faun. Suec. 2170.*

Strombiformis minor albus aut pullo variegatus, costis longitudinalibus elatis eleganter distinctus. CLATHRATUS. *Da Costa, Br. Conch. p. 115. sp. 67. tab. 7. fig. 11.*

Cochlea variegata, striis raris admodum eminentibus exasperatae. *List. H. Conch. tab. 588. fig. 51.*

Turbo Clathratus. Barred Wentletrap. *Penn. Br. Zool. No. 111. tab. 81. fig. 111. 111. A.*

Fausse scalata. *D'Avila, p. 221. No. 427.*

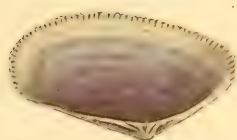
PLATE XXVIII.

This is one of the most singular species that is found on the British coasts. It is very analagous to the famous *Scalaris* or *Wentletrap* of the East Indies, which bears such a high price amongst Conchologists; and from this analogy it is called the False *Wentletrap*. Its length is about an inch, and sometimes two inches or even more. The mouth is perfectly round, and bordered with a thick ring; from this ring arise several distinct equi-distant prominent ridges, generally eight in number, which extend the whole length of the shell in an obliquely longitudinal direction. These ridges appear the more remarkable and prominent, as the spires are very convex or swelled, and separated from each other by a deep spiral channel. The colour of most specimens is milk white, but is sometimes obscured with brown, or marked transversely with distinct circles of ferruginous interrupted lines.

Turbo Clathratus is found on several of the British coasts,



1



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1

PLATE XXIX.

FIG. I.

DONAX TRUNCULUS.

RIBBAND.

GENERIC CHARACTER.

Bivalve. Frontal margin very blunt.

SPECIFIC CHARACTER

AND

SYNONYMS.

Shell shallow, glossy. Outside fasciated with brown and purple.
Inside purple. Margin crenated.

DONAX TRUNCULUS: testa antice lævi intus violacea, marginibus
crenatis. *Linn. Syst. Nat.*

Tellina subfusca angustior, inter purpurascens. *List. II. Conch.*
tab. 376. fig. 217.

Cuneus angustior lævis subfuscus vittis purpurascentibus fasciatus
vittatus. *Da Costa, Br. Conch. p. 207. sp. 41.*

Donax trunculus. Yellow. *Penn. Br. Zool. No. 45. tab. 55.*
fig. 45.

This pretty species is about one inch and a half in length. It is found on the coasts of Essex, Sussex and Cornwall, and also on those of Wales, Scotland and Ireland.

PLATE XXIX.

FIG. II.

DONAX IRUS.

FOLIATED PURR:

SPECIFIC CHARACTER.

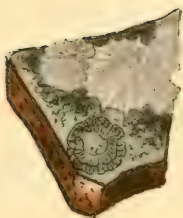
Oval. Outside rugged or wrinkled transversely with numerous raised membranous waved laminæ or foliations.

DONAX IRUS: testa ovali, rugis membranaceis erectis striatis cincta. Cuneus parvus albescens, rugis foliaceis et membranaceis erectis transversim cinctus. Foliatus. *Da Costa. Brit. Conch. p. 204.—Sp. 39. tab. 15. fig. 6.*

Found in abundance in Cornwall buried in the sands, and not uncommon on the shores of Dorsetshire.



2



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PLATE XXX.

FIG. I.

LEPAS BALANUS.

RIDGED ACORN SHELL.

GENERIC CHARACTER.

Animal Triton. Shell of many unequal valves; affixed by a stem.

SPECIFIC CHARACTER

AND

SYNONYMS.

Shell conic, deeply furrowed, or wrought with prominent longitudinal ridges. Operculum sharp pointed.

LEPAS BALANUS: testa conica sulcata fixa, operculis acumunatis.

Linn. Syst. Nat. p. 1107.

Balanus majusculus valvis porcatis. Porcatus. *Da Costa, Br.*

Conch. p. 249. sp. 69.

Frequent on the British coasts, adhering to rocks, shells, &c.—
It is a large and strong species, being seldom less than the size of a filbert, of a conic form and rugged appearance, and is wrought with very prominent longitudinal ridges.

PLATE XXX.

FIG. II.

LEPAS COSTATA.

RIBBED ACORN SHELL.

SPECIFIC CHARACTER.

Shell somewhat conic. Ribs equidistant and diverging from the aperture. Operculum sharp pointed.

LEPAS COSTATA: testa subconica operculis acutis: valvulis costatis.

This curious and rare species, which has not been hitherto described or figured, was found by the late T. Adams, Esq. of Pembroke, adhering to pieces of broken rock, and is in the possession of the Rev. T. Rackett, of Spetisbury, Dorset, to whose liberality we indebted for figures of this, and several other British shells not included in our own collection.

FIG. III.

LEPAS CONOIDES.

SPECIFIC CHARACTER.

Conic. Smooth, valves pointed at the apex: aperture very small.

LEPAS CONOIDES: testa conica levi valvulis acuminatis, apertura angustissima.

Found by Mr. Bryer of Weymouth, affixed to the *Lepas anatifera*.





PLATE XXXI.

MUREX DESPECTUS.

THE LARGE OR DESPISED WHELK.

GENERIC CHARACTER.

Spiral, rough. The aperture ending in a strait and somewhat produced gutter or canaliculation.

SPECIFIC CHARACTER

AND

SYNONYMS.

Mouth wide, oval and somewhat elongated and cancellated at the upper end. Spires eight.

MUREX DESPECTUS: testa paulo subcaudata oblonga anfractibus octo. *Gmel. Linn. Syst. Nat. p. 3547.*

Buccinum album læve, maximum, septem minimum spirarum. *List. II. An. Angl. p. 155. tit. 1. tab. 3. fig. 1.*

Buccinum rostratum majus crassum, orbibus paululum pulvinatis. *List. II. Conch. tab. 913. fig. 4.*

Murex Despectus. Despised. *Penn. Br. Zool. t. 78. fig. 93.*

Buccinum canaliculatum magnum crassum striatum album. MAGNUM. *Da Costa tab. 6. fig. 4. p. 120.*

This is the largest of the turbinated univalves found in the British seas. It inhabits deep water, and is said to be a common shell on the

PLATE XXXI.

Essex, Sussex, and many other of the English shores as well as in Scotland, the Orkneys and many of the Irish shores also. On the Dorset coast it is rare.

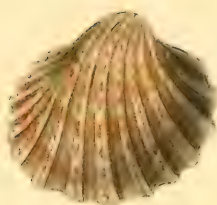
It is frequently drawn up with oysters, and is sometimes eaten ; but as it is coarse food, it more commonly furnishes bait to fishermen.

The largest shells of this sort, found in our seas, sometimes exceeds five inches in length ; it is a strong, thick, and heavy shell ; of a whitish colour on the outside ; within of a most lovely yellow, inclining to orange, smooth, and very glossy.





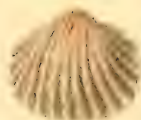
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PLATE XXXII.

FIG. I.

CARDIUM MEDIUM.

PIGEON'S HEART COCKLE.

GENERIC CHARACTER.

Two teeth near the beak ; and another remote one on each side of the shell.

SPECIFIC CHARACTER

AND

SYNONYMS.

Shell somewhat heart-shaped, and furrowed longitudinally, retuse on one side.

CARDIUM MEDIUM : testa subcordata, antice retusa longitudinaliter striato sulcata. *Linn. Syst. Nat. n. 77. p. 1122. List. Conch. t. 316. fig. 152. Gualt. t. 83. f. b. Chemn. Conch. t. 16. fig. 162.— 165.*

This shell has not hitherto been noticed as of English growth. Our specimen, which differs in no respect from those found in the Mediterranean sea, was found near Hartlepoole, on the coast of Durham.

PLATE XXXII.

FIG. II.

CARDIUM CILIARE.

FRINGED COCKLE.

SPECIFIC CHARACTER

AND

SYNONYMS.

Shell roundish, inclining to heart shape. Ribs longitudinal, triangular, and beset along the ridges with thin spines.

CARDIUM CILIARE : testa subcordata, sulcis elevatis triquetris :
extimis aculeato ciliatis. *Linn. Syst. Nat.*
p. 1122. 80.

Pectunculus albus exiguus, muricibus insigniter exasperatus. *Wal-*
lace Orkn. p. 44.

Pectunculus minimus triquetrus Essexiensis. *Petiv. Gaz. tab. 93.*
fig. 11.

Cardium parvum tenue, costis triquetris aculeatis. *Parvum. Dø*
Costa Brit. Conch. p. 177. 17.

Pennant describes this species as having eighteen ribs, and Da Costa about fifteen ; we have specimens that agree, in this respect, with the descriptions of both authors. The shell figured by the first is the size of a hazel nut ; the latter says, he has never seen it larger than a nutmeg : a worn shell, with the habit of this species, that has been found since, is full twice that size.

This delicate shell is found on several of our coasts, as Cornwall, Dorsetshire, and Devonshire ; also in the Orkneys.

PLATE XXXII.

FIG. III. III.

CARDIUM PYGMÆUM.

PYGMY COCKLE.

SPECIFIC CHARACTER

AND

SYNONYMS.

Nearly heart-shaped, somewhat angulated, furrows imbricated or beset with recurvated scales.

CARDIUM PYGMÆUM: testa subcordata, subangulata, sulcis recurvato imbricatis.

Cardium exiguum. *Gmel. Linn. Syst. Nat. p. 3255. sp. 37?*

List. Conch. t. 317. f. 154.

Testacea minuta rariora t. 3, f. 83.

Size of a large currant, of a reddish brown, or sometimes whitish colour.

Found in Kent, and at Falmouth, in Cornwall



2



3



3



PLATE XXXIII.

FIG. I. II.

TURBO LITTOREUS.

COMMON PERIWINKLE.

GENERIC CHARACTER.

Animal Limax. Univalve, spiral, or of a taper form. Aperture somewhat compressed, orbicular, entire.

SPECIFIC CHARACTER

AND

SYNONYMS.

Shell with five spires : the first much swelled, the turban tapering and sharp pointed ; striated spirally. Lip thin, and much spread on the pillar.

TURBO LITTOREUS : testa subovate acuta striata, margine columnari plano. *Linn. Syst. Nat. p. 1232. No. 607.*
Fn. Sv. 2. 2169.

Turbo Littoreus, Periwinkle. *Penn. Br. Zool. No. 109. tab. 81.*
fig. 109.

Turbo-pyramidalis crussus fuscus, striis crebris præditus. *Littoreus.*
Da Costà, Br. Conch. p. 98. 55.

It is needless to enter into detail on a species so well known as the Common Periwinkle ; yet it may be proper to observe, these shells, in many instances, vary considerably. The young shells are reddish,

PLATE XXXIII.

whitish, yellowish, or brown, of various hues, sometimes uniform, or without any markings; at others, girdled spirally with darker colours. The adults also are sometimes bright red, orange, chesnut, or whitish, or olive, with, and sometimes without, the spiral lineations. They vary no less in size than in colours; and those of the Orkneys, in particular, are quadruple, the size of those on the Irish or English coast.

It is said, the name Periwinkle is a corruption of *Petty Winkle*, or small Winkle, or Whelk.

Fig. I. I., &c. Adult varieties of *Turbo Littoreus*. Fig. II. II. the young shells.

FIG. III. III.

TURBO RUDIS.

THICK-LIPPED PERIWINKLE,

SPECIFIC CHARACTER.

Shell somewhat tapering, without umbilicus. Volutions of the spires, or turban swelled. Lip thick, and glossy within.

This shell has been kindly communicated by Dr. Maton, as a new species. It is noticed in the first volume of that gentleman's *Observations on the WESTERN COUNTIES*; but has not, we believe, been hitherto figured. It was discovered on the banks of the Tamar, in Devonshire, near Bere-Alston, and is thus described:

PLATE XXXIII.

“ In the mud appeared a species of *Turbo*, which, though very similar to *T. Littoreus* (the common Periwinkle), has some characters that seem to authorize its being considered as a different shell. The *anfractus* are much more swollen, as it were, than in the above species; the spire is more depressed; and, besides, there is no appearance of *strise*, either transversely or longitudinally. This shell has a sort of distorted or rude *contour*, that may, perhaps, entitle it to the appellation of *T. Rudis*. Its colour is greenish.” Page 277. *vol. 1.*



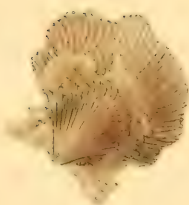
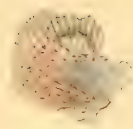
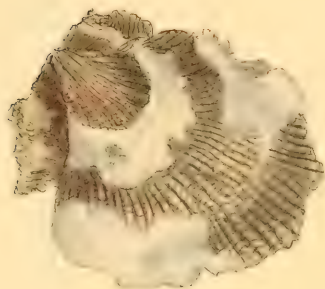
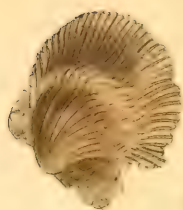
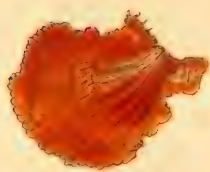


PLATE XXXIV.

OSTREA PUSIO.

DISTORTED.

GENERIC CHARACTER.

Animal a Tethys. Shell bivalve, unequal. The hinge without a tooth, having a small oval cavity.

SPECIFIC CHARACTER

AND

SYNONYMS.

Eared. With about forty longitudinal rays. Shell irregular, or distorted.

Concha testa aurita, striis circiter quadraginta. *Linn. F. Suec.* 1. p. 384. No. 1345.

Pecten minimus angustior, inæqualis fere et asper, sinu ad cardinem cylindraceo, ceberimis minutissimisque striis donatus. *List. Hist. Angl.* p. 186. tit. 31. tab. 5. fig. 31.

Pecten Pusio. Writhed. *Penn. Br. Zool.* No. 65. tab. 61. fig. 65.

Pecten minor alba, contusa proteiformis. *Petiv. Gazoph.* tab. 94. fig. 2.

Twisted Pectines of *Stroma*. *Wallace, Orkn.* p. 43, 44

Pecten parvus inæqualibus, informis, striatus. DISTORTUS, DISTORTED. *Da Costa, Br. Conch.* p. 148. tab. 10. fig. 3. 6.

PLATE XXXIV.

Dissimilar as the several figures in this plate may appear, they are merely accidental varieties in size, growth, and colour of an individual species. These shells are generally about an inch, or more, in length, and of a somewhat globose shape ; but so extremely irregular and distorted, that it can with difficulty be defined. Dr. Wallace calls these shells the twisted pectines of Stroma, a little island that lies in the Pightland Frith ; he found them on some parts of the Orkneys, where he observed extraordinary cross and strong tides. The irregular form of these pectines rather surprised him. He adds, “ I cannot think the odd strange tumbling the tides make there, can contribute any thing to that frame ; yet, after all, I never see them in any other place.”— These shells are now found on several of the English shores, as Yorkshire, Scarborough, Mouth of the River Tees, and Dorsetshire ; and are also frequent in the fossil state, in the chalk pits of Kent and Surry. Both valves are convex, and much distorted, but the under one is usually the most irregular ; the ribs are numerous, close set, longitudinal, and prominent. The inside of the lower valve is smooth and white, when alive, and that of the upper has a pearly gloss. The outside is generally of a dingy white, or yellowish cast ; sometimes pale violet, or russety ; or white mottled, and varied with brown, or brilliant red.

The ears of this shell are large, and nearly equal, but are often so distorted as to appear much otherwise. It is proper to observe, that though the irregular form this shell assumes may be attributed to some injury it has sustained in its growth, every shell of this species is constantly found with the same distorted appearance. This circumstance leaves no reason to doubt that such distortions are characteristic of this extraordinary and peculiar species.



PLATE XXXV.

MUREX ERINACEUS.

GENERIC CHARACTER.

Spiral, rough. The aperture ending in a strait and somewhat produced gutter or canaliculation.

SPECIFIC CHARACTER.

AND

SYNONYMS.

Shell subangular, rugose, or covered entirely with raised scales or points. Spires fix.

MUREX ERINACEUS: testa multifarium subfrondoso-spinosa, spiræ anfractibus retuso coronatis, cauda abbreviata. *Linn. Syst. Nat.* 526. p. 1216. — *Gmel. Linn. Syst. Nat.* p. 3530.

Buccinum majus canaliculatum, rostratum, ore labioso, fimbriatum, umblicatum, ore angusto, oblongo, rugosum, costulatum, striis eminentibus reticulatim exasperatum, albidum. *Gualt. 1. Conch. Tab.* 49. fig. H.

MUREX ERINACEUS. Urchin. *Penn. Br. Zool. No.* 95. tab. 76. fig. 95. *Seba. Mus.* 3. t. 49. fig. 78, 79. — *Martin. Conch.* 3. t. 110. f. 1026—8.

Buccinum longirostrum medium subangulatum, porcis spiralibus distinctum. Porcatum. *Da Costa. tab.* 8. fig. 7. 7. p. 133.

PLATE . XXXV.

Found on the coast of Cornwall, and Dorsetshire, and also on that of Hilbree island in Cheshire.



PLATE XXXVI.

FIG. I.

LEPAS INTERTEXTA.

GENERIC CHARACTER.

Animal Triton. Shell of many unequal valves: affixed by a stem.

SPECIFIC CHARACTER

AND

SYNONYMS.

Shell rather depressed and ribbed obliquely.

LEPAS INTERTEXTA: testa subdepressa oblique costata.

Lepas striata. *Penn. Br. Zool. t. 38. f. 7.*

Walker test. min. rar. f. 87.

This rare species is the *Lepas intertexta* of the Portland Museum; it was fished up at Weymouth, adhering to a valve of the *Ostrea sub-rufus*.

The shells of this genus are in general very complex in structure, the present is particularly so. Several shells of the natural size is represented on the orange space of the *Ostrea*, Fig. I.—Three figures are added to exhibit their magnified appearance; to distinguish these, the space is coloured green.

PLATE XXXVI.

FIG. II. III.
LEPAS BALANOIDES.

COMMON ACORN SHELL.

SPECIFIC CHARACTER

AND

SYNONYMS.

Shell conic truncated, of six valves. Operculum bifid.

LEPAS BALANOIDES: testa conica truncata; operculo obtuso
Linn. Faun. Suec. 1. p. 385. No. 1348 2.
No. 2123.

Balanus vulgaris parvus conicus é senis laminis compositus, vertice
operculo bifido rhomboide ocluso. *Da Br.*
Conch. p. 248. sp. 68. tab. 17, fig. 7.

Balanus cinereus, velut é senis laminis striatis compositus, ipso vertice
altera testa, bifida, rhomboide ocluso. *Balani*
parva species. *List. H. An. Angl.* p. 196.
tit. 41. tab. 5. fig. 41.

These shells are found in the greatest abundance on all the British shores, adhering to rocks, shells, &c. &c.

Da Costa says, this species, when not affixed on flat, but uneven surfaces, sometimes, but rarely, extend down into a pretty long rugged tubular stalk or root. This variety is noted by Pennant, and an extraordinary, but mutilated specimen of it, is shewn at fig. 3.

INDEX.

VOL. I.

LINNÆAN ARRANGEMENT.

MULTIVALVIÆ.

						Plate.	Fig.
LEPAS	balanus	-	-	-	-	30	1. 1.
————	balanoides	-	-	-	-	36	2. 3.
————	costata	-	-	-	-	30	2.
————	conoides	-	-	-	-	30	3.
————	intertexta	-	-	-	-	36	1.
————	anatifera	-	-	-	-	7	

BIVALVIA. CONCHÆ.

Tellina	bimaculata	-	-	-	-	29	1. 1.
————	tenuis	-	-	-	-	29	2. 2.
Cardium	aculeatum	-	-	-	-	6	
————	medium	-	-	-	-	32	1.
————	ciliare	-	-	-	-	32	2.
————	pygmeum	-	-	-	-	32	3. 3.
Donax	crenulata	-	-	-	-	24	
————	trunculus	-	-	-	-	29	1. 1.
————	irus	-	-	-	-	29	2. 2.
Venus	Chione	-	-	-	-	17	
Ostrea	varia	-	-	-	-	1	1. 1. 1.
————	subrufus	-	-	-	-	12	
————	pusio	-	-	-	-	34	
————	obfoletus	-	-	-	-	1	2.
Anomia	Ephippium	-	-	-	-	26	
Mytilus	modiolus	-	-	-	-	23	
————	discors	-	-	-	-	25	
Pinna	muricata	-	-	-	-	10	

I N D E X.

UNIVALVIA.					Plate.	Fig.
<i>Bulla lignaria</i>	-	-	-	-	27	
<i>Buccinum Lapillus</i>	-	-	-	-	11	
——— <i>Lineatum</i>	-	-	-	-	15	
<i>Strombus Pes Pelecani</i>	-	-	-	-	4	
<i>Murex despectus</i>	-	-	-	-	31	
——— <i>Erinaceus</i>	-	-	-	-	55	
<i>Trochus magus</i>	-	-	-	-	8	1.
——— <i>Conulus</i>	-	-	-	-	8	2. 3.
<i>Turbo littoreus</i>	-	-	-	-	33	1. 2.
——— <i>rudis</i>	-	-	-	-	33	3.
——— <i>terebra</i>	-	-	-	-	22	2.
——— <i>cinctus</i>	-	-	-	-	22	1. 1.
——— <i>clathrus</i>	-	-	-	-	28	
——— <i>fasciatus</i>	-	-	-	-	28	1. 1.
——— <i>cimex</i>	-	-	-	-	2	1. 1.
——— <i>pullus</i>	-	-	-	-	2	2. 3. 4. 5. 6.
<i>Helix nemoralis</i>	-	-	-	-	13	
<i>Nerita glaucina</i>	-	-	-	-	20	1. 1.
——— <i>littoralis</i>	-	-	-	-	20	2. 2.
——— <i>fluvialitis</i>	-	-	-	-	16	2.
——— <i>pallidus</i>	-	-	-	-	16	1.
<i>Haliotis tuberculata</i>	-	-	-	-	5	
<i>Patella vulgata</i>	-	-	-	-	14	
——— <i>ungaria</i>	-	-	-	-	21	1.
——— <i>parva</i>	-	-	-	-	21	2. 2.
——— <i>reticulata</i>	-	-	-	-	21	3. 3.
——— <i>pellucida</i>	-	-	-	-	5	1. 1. 2.
——— <i>fissura</i>	-	-	-	-	3	2.
<i>Serpula spirorbis</i>	-	-	-	-	9	

INDEX TO VOL. I.

ACCORDING TO

HISTORIA NATURALIS TESTACEORUM BRITANNIÆ OF DA COSTA.

GENUS 1. PATELLA, LIMPET FLITHER OR PAP SHELL.

* MARINÆ. SEA

					Plate.	Fig.
PATELLA vulgaris, common	-	-	-	-	14	
Patella parva, small	-	-	-	-	21	2. 2.
Patella cœruleata, blue rayed	-	-	-	-	3	1. 1.
Patella fissura, slit	-	-	-	-	3	2. 2.
Patella pileus morionis major, large fool's cap	-	-	-	-	21	1.
Patella reticulata, reticulated masque limpet	-	-	-	-	21	3. 3.

GENUS 2. HALIOTIS, EAR SHELL.

Haliotis vulgaris, common	-	-	-	-	5
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GENUS 3. SERPULA. WORM SHELL.

Serpula spirorbis, spiral	-	-	-	-	9
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INDEX.

PART II.

UNIVALVIA INVOLUTA.

GENUS 5. BULLA. DIPPER.

* MARINÆ. SEA.

					Plate.	Fig.
Bulla lignaria, wood	-	-	-	-	27	

PART III.

UNIVALVIA TURBINATA.

TROCHUS TOP SHELL.

* MARINÆ. SEA.

conulus, conule	-	-	-	-	8	2. 3.
Trochus tuberculatus, knobbed	-	-	-	-	8	1.

COCHLEÆ, OR SNAILS.

GENUS 8. NERITA, NERIT.

* FLUVIATILES. RIVER.

Nerita Fluvialis. River	-	-	-	-	16	2.
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MARINÆ SEA.

Nerita Littoralis. Strand	-	-	-	-	20	2. 2.
Nerita Pallidulus, pale	-	-	-	-	16	1.

GENUS 9. HELIX.

* TERRESTRES. LAND.

HELIX.

Cochlea fasciata, girdled	-	-	-	-	13	
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I N D E X.

*** MARINÆ. SEA.

				Plate	Fig.
Cochlea catena. Chain	-	-	-	20.	1. 1.

GENUS 11. TURBO.

* TERRESTRES. LAND.

Turbo fasciatus. Fasciated	-	-	-	18	1. 1.
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*** MARINÆ. SEA.

Turbo Littoreus, periwinkle	-	-	-	33	1. 2.
Turbo pictus, painted	-	-	-	2	2, 3, 4, 5, 6
Turbo cancellatus, latticed	-	-	-	2	1. 1.

GENUS 13. STROMBIFORMIS. NEEDLE SNAIL.

Strombiformis terebra, auger	-	-	-	22	2.
Strombiformis cinctus, girdled	-	-	-	22	1. 1.
Strombiformis clathratus, barred or false wentletrap	-	-	-	23	

BUCCINA, WILKS, OR WHELKS.

GENUS 13. BUCCINA CANALICULATA.

GUTTERED WHELKS.

* MARINÆ. SEA.

Buccinum magnum, large	-	-	-	31	
Purpuro-Buccinum, purple whelke	-	-	-	11	

I N D E X.

MURICES, ROCKS.

GENUS 16. APORRHAIIS.

* MARINÆ. SEA.

	Plate.	Fig.
Aporrhais quadrifidus, four fingered	4	

ORDER 2.

BIVALVES.

GENUS 1. PECTEN. ESCALLOP.

Pecten pictus, painted	12	
Pecten distortus, distorted	34	
Pecten monotis, one eared	1	1. 1.
Pecten parvus, small	1	2.

GENUS 3. ANOMIA.

* MARINÆ. SEA.

Anomia tunica cepæ, onion peel	26	
--------------------------------	----	--

DIVISION 2.

GENUS 6. CARDIUM. HEART COCKLE.

** MARINÆ. SEA.

Cardium aculeatum, spiked	6	
Cardium parvum, small	32	2.

I N D E X.

GENUS 7. PECTUNCULUS. COCKLE.

* MARINÆ. SEA.

				Plate.	Fig.
Pectunculus glaber, smooth	-	-	-	17	

GENUS 9. CUNEUS. PURR.

* MARINÆ. SEA.

Cuneus fasciatus, fasciated					
Cuneus foliatus, foliated	-	-	-	29	2. 2.
Cuneus truncatus, truncated	-	-	-	24	
Cuneus vittatus, ribband	-	-	-	29	1. 1.

GENUS 11. MYTILUS MUSCLE.

* MARINÆ. SEA.

Mytilus Modiolus, great	-	-	-	23	
Mytilus discors, divided	-	-	-	25	

GENUS 15. PINNA. SEA HAM OR WING

* MARINÆ. SEA.

Pinna muricata, thorny	-	-	-	10	
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PART IV.

MULTIVALVES.

GENUS 18.

Balanus vulgaris, common	-	-	-	36	2. 3.
Balanus porcatus, ridged	-	-	-	32	1.
Balanus anatiferus barnacle	-	-	-	7	

ALPHABETICAL INDEX TO VOL. I.

					Plate.	Fig.
ACULEATUM , Cardium, Spiked Cockle	-	-	-	-	6	
Anatifera, Lepas, Barnacle	-	-	-	-	7	
Balanoides, Lepas	-	-	-	-	26	2.
Balanus, Lepas	-	-	-	-	30	1. 1.
Bimaculata Tellina, Double Spot Tellen	-	-	-	-	19	1. 1.
Chione, Venus	-	-	-	-	17	
Ciliare, Cardium	-	-	-	-	32	2.
Cimex, Turbo, Latticed Whelk	-	-	-	-	2	1. 1.
Cinctus, Turbo, girdled	-	-	-	-	22	1. 1.
Clathratus, Turbo, False Wentletrap	-	-	-	-	28	
Conoides, Lepas, Conio Acornshell	-	-	-	-	30	3.
Conulus, Trochus, Conule	-	-	-	-	3	2. 3.
Costata, Lepas, Ribbed Acorn-shell	-	-	-	-	30	2.
Despectus Murex, Despised Whelk	-	-	-	-	31	
Discors, Mytilus, divided	-	-	-	-	25	1.
Erinaceus, Murex	-	-	-	-	35	
Fasciatus, Turbo, fasciated	-	-	-	-	18	1. 1.
Fissura, Patella, Slip Limpet	-	-	-	-	3	
Fluviatilis, Nerita, River Nerit	-	-	-	-	16	2. 2.
Glaucina, Nerita, Chain Nerit	-	-	-	-	20	1. 1.
Hungarica, Patella, Large Fool's Cap, Limpet	-	-	-	-	21	1. 1.
Intertexta Lepas, Striated Acorn Shell	-	-	-	-	36	1.
Irius Tellina, Foliated Purr	-	-	-	-	29	2. 2.
Lapillus, Buccinum, Massy, or Purple Whelk	-	-	-	-	11	
Lignaria Bulla	-	-	-	-	27	
Lineatum, Buccinum, lined	-	-	-	-	15	
Littoralis, Nerita	-	-	-	-	20	2. 2.
Littoreus, Turbo	-	-	-	-	33	1. 1. 2.
Magus, Trochus, Tuberculated Top Shell	-	-	-	-	8	1.
Medium Cardium, Pigeon's Heart Cockle	-	-	-	-	32	1.
Modiolus Mytilus	-	-	-	-	23	
Muricata Pinna, Thorny Wing, or Sea Ham	-	-	-	-	10	

I N D E X.

Nemoralis, Helix, Girdled Snail	-	-	-	-	13			
Obsoletus, Pecten	-	-	-	-	1	2.	2.	
Pallidulus, Nerita, Pale Nerit	-	-	-	-	16	1.		
Pellucida, Patella, Blue Rayed Limpet	-	-	-	-	3	1.	1.	
Pes Pelecani, Strombus, Corvorant's Foot	-	-	-	-	4			
Pullus Turbo, Painted Whelk	-	-	-	-	2	2.	3.	4. 5.
Pusio, Ostrea, distorted	-	-	-	-	34			
Pygmeum, Cardium, Small Cockle	-	-	-	-	32	3.		
Reticulata, Patella, Reticulated Mask Limpet	-	-	-	-	21	3.		
Rudis, Turbo, Thicklipped	-	-	-	-	33	3.	3.	
Subrufus, Ostrea	-	-	-	-	12			
Spirorbis, Serpula, Wrackspangle	-	-	-	-	9			
Tenuis, Tellina, Thin Tellen	-	-	-	-	19	2.	2.	
Terebra, Turbo	-	-	-	-	22	2.	2.	
Trunc-culus, Tellina	-	-	-	-	29	1.	1.	
Tuberculata, Haliotis, Tuberculated Sea Ear	-	-	-	-	5			
Varia Ostrea, Variegated, or One-eared Scallop	-	-	-	-	1			
Vulgata, Patella, Common Limpet	-	-	-	-	14			

THE
NATURAL HISTORY
OF
BRITISH SHELLS,

INCLUDING
FIGURES AND DESCRIPTIONS
OF ALL THE
SPECIES HITHERTO DISCOVERED IN GREAT BRITAIN,

SYSTEMATICALLY ARRANGED
IN THE LINNEAN MANNER,
WITH
SCIENTIFIC AND GENERAL OBSERVATIONS ON EACH.

VOL. II.

By E. DONOVAN, F.L.S.

AUTHOR OF THE NATURAL HISTORIES OF
BRITISH BIRDS, INSECTS, &c. &c.

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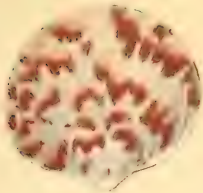
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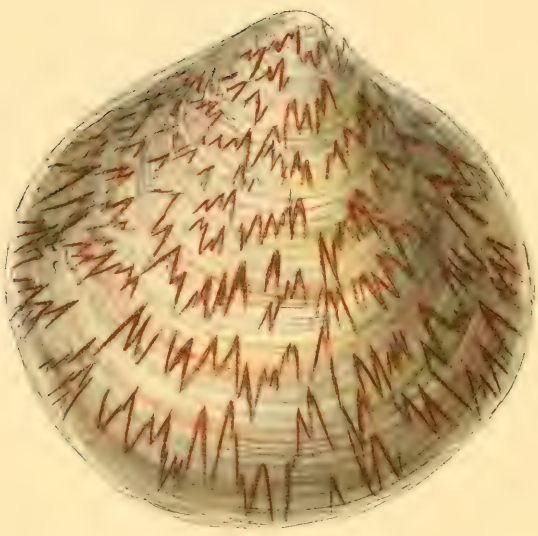
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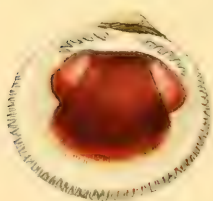
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THE
NATURAL HISTORY
OF
BRITISH SHELLS.



PLATE XXXVII.

ARCA GLYCYMERIS.

ORBICULAR ARK.

GENERIC CHARACTER.

Bivalve, valves equal. Teeth of the hinge numerous, and inserted between each other.

SPECIFIC CHARACTER

AND

SYNONYMS.

Orbicular, concave, very finely striated transversely and longitudinally, and variegated with zigzag marks. Margin crenated.

ARCA GLYCYMERIS: testa suborbiculata gibba, substriata, natibus incurvis, margine crenato. *Linn. Syst. Nat.* p. 1143. No. 181.

P L A T E X X X V I I .

- Chama glycymeris*, Bellon. *Pectunculus ingens variegatus ex rufo.*
List. H. Conch. tab. 247. fig. 82.
- Concha crassa*, lævis, subalbida, luteis maculis radiata, signata, fasciata; et virgulata, intus macula fusca obscurata. *Gualt. 1. Conch. tab. 72. fig. G.*
- Glycymeris cornubiensis crassa marmorata.* *Mus. Petiv. p. 84.*
No. 816.
- Bastard, or dog's cockle. *Rutty Dublin, p. 379.*
- Arca glycymeris*, orbicular, *Penn. Br. Zool. No. 58. tab. 58. fig. 58.*
- Glycymeris.* Orbicularis crassa subalbida lineis rufulis sagittæformibus variegata, intus obfuscata margineque crenato. Orbicularis. *Da Costa. Br. Conch. p. 168, tab. 11. fig. 22.*
-

This species is found, of a large size, in the Mediterranean sea; those which inhabit the English coast, as Falmouth and Cornwall, rarely exceed the size of the smallest specimen we have represented. It is found likewise on the shores of Guernsey, and the coast of Ireland, where it is called the *dog's cockle*.



PLATE XXXVIII.

MUREX CORNEUS.

HORNÝ, OR SLENDER WHELK.

GENERIC CHARACTER.

Spiral, rough. The aperture ending in a strait, and somewhat produced gutter, or canaliculation,

SPECIFIC CHARACTER.

AND

SYNONYMS.

Slender, white. Spires eight, swelled. Mouth oblong oval, ending in a produced or lengthened deep twirled gutter.

MUREX CORNEUS: testa oblonga rudi, anfractuum marginibus complanatis, apice tuberculoso, apertura edentula, cauda adscendente. *Linn. Syst. Nat. p. 1224. No. 565.*

Buccinum angustius, tenuiter admodum striatum, octo minimum spirarum. *List. H. An. Angl. p. 157. tit. 4. tab. 3. fig. 4.—App. H. An. Angl. p. 15, 16.*

Lesser long and smooth whelke, *Dale Harw. p. 381. No. 2.—Smith Cork, p. 401. No. 7.*

Narrow-mouthed whelke, with eight wreaths, *Wallis Northumb p. 401. No. 7.*

Murex corneus, Horny. *Penn. Brit. Zool. No. 99. tab. 76. fig. 99.*
Buccinum canaliculatum medium, angustius, album, striatum, octo spirarum. **GRACILE** *Da Costa, p. 124. sp. 74. tab. 6. fig. 5.*

PLATE XXXVIII.

This shell is white, semitransparent, and rather glossy; and when alive is covered with a fine thin brown film, or epidermis, which is striated spirally. It is found on several of the English coasts, as Yorkshire, Northumberland, Essex, &c. and also on the shores of Scotland and Ireland.



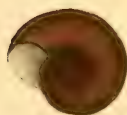
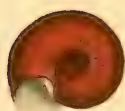
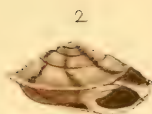


PLATE XXXIX.

FIG. I.

HELIX CORNEA.

RAM'S HORN.

GENERIC CHARACTER.

Aperture of the mouth, contracted, and lunated.

SPECIFIC CHARACTER

AND

SYNONYMS.

Wreaths, four, turned nearly horizontal: rather depressed or concave towards the centre.

HELIX CORNEA: testa supra umbilicata plana nigricante, anfractibus quatuor teretibus. *Lin. Syst. Nat. p. 1243. No. 671.*

—*F. Suec. I. p. 373. No. 1304. II. No. 2179.*

Cochlea pulla, ex utraque parte circa umbilicum cava. *List. II. Angl. p. 143. tit. 26. tab. 2. fig. 26.*

Cochlea maxima, compressa, fasciata. *List. II. Conch. tab. 136. fig. 40.*—Cochlea pulla quatuor orbium coccum fundens, purpura lacustris. *Id. tab. 137. fig. 41.*

The Flat Whirl. *Grew. Mus. p. 136.*

Planorbis fluviatilis major vulgaris. *Petiv. Gazoph. tab. 92. fig. 5.*

Helix Cornea, Horny. *Penn. Br. Zool. No. 126. tab. 83. fig. 126.*

P L A T E X X X I X .

Helix fluviatilis depressa major, anfractibus quatuor, ex utraque parte circa umbilicum cava. Cornu arietis. *Tab. 4. fig.*

13. *DA COSTA Br. Conch. p. 60. tab. 4. fig. 13.*

Purpura. S. Cochlea fluviatilis compressa major. List. Exerc. Anat. 2. p. 59.

The adult shells of this species are from three quarters of an inch, to an inch and a quarter in diameter; the colours various, generally brownish or ashen colour, inclining in some to red, in others to yellow; the young shells are whitish and more transparent.

It is very common in ponds and rivers. The animal is blackish brown, and has two red capillary horns*.

The *Helix Nana*, or Dwarf of Pennant, fig. 125, is considered by *Da Costa* and other conchologists, as a young shell of this species.

* “ This fish emits a fine scarlet humour, if a grain of salt of any kind, or a little pepper or ginger, be put into the mouth of the shell. It emits this fine scarlet humour all the year, especially in April and September. *Dr. Lister* gives a full account of it. He says, this scarlet humour may be readily got, and in great quantity, if a large parcel of these shells be wrapped up in a cloth bag, sprinkling over it a little salt; then the scarlet liquor will ouze plentifully. The colouring part of this humour immediately subsides, if sprinkled with powdered allum, and the rest of it remains like clear water. The colouring part may be strained through a filtering paper, but the elegance of its colour is lost, and it changes into a dull, unpleasant rusty brown. Moreover, if mixed with vinegar, spirit of wine, deliquated vegetable salts, or common salt dissolved, this elegant scarlet colour perishes in the same manner as when mixed with allum. Neither can this liquor be kept by itself pure and unmixed; for in vain did the doctor strive to preserve it in narrow mouthed bottles or phials, perfectly well closed, and with oil or honey thrown over it. Thus this colour is of so fugitive a nature, that no acid or astringent has been found sufficient, to preserve the elegance of its tint.”

“ *Dr. Lister* further recites some observations and experiments he made on this scarlet fluid, to discover whether it was a humour of the body, or to be got by laceration or incision, as blood; a saliva from the throat or stomach; or a particular humour contained in certain vessels or parts; but the nicety and difficulty of the experiments rendered it impossible for him to determine it precisely.” *Da Costa*, page 61, 62,

PLATE XXXIX,

FIG. II.

HELIX LAPICIDA,

ACUTE EDGED.

SPECIFIC CHARACTER

AND

SYNONYMS.

Above and beneath rather convex; back of the wreaths carinated.
Deeply umbilicated,

HELIX LAPICIDA: testa carinata umbilicata utrinque convexa, apertura marginata transversali ovata. *Linn. Syst. Nat.* p. 1241. No. 656.

Cochlea testa utrinque convexa, subtus perforata, spira acuta apertura ovata transversali. *Linn. Faun. Suec.* 1. p. 371. No. 1298. 11. No. 2174.

Cochlea pulla, sylvatica, spiris in aciem depressis. *List. H. An. Angl.* p. 126. tit. 14. tab. 2. fig. 14.

Cochlea nostras, umbilicata, pulla. *Hist. H. Conch.* tab. 69. fig. 68.

Planorbis terrestris Anglicus, umbilico minore, margine acuto. *Mus. Petiv.* p. 69. No. 734.

Cochlea terrestris media acie acuta: land cheese shell with a sharp edge. *Petiv. Gaz.* tab. 92. fig. 11.

Helix Lapidica. *Rock. Penn. Br. Zool.* No. 121. tab. 83. fig. 121,

Cochlea umbilicata, margine in acie acuto depresso, ACUTA. sharp. *Da Costa Br. Conch.* p. 55. tab. 4. fig. 9. 9.

PLATE XXXIX.

This species is found in several countries of Europe. In Great Britain it seems to be a local and rather uncommon kind. Da Costa says "though found in many parts of England, is not met with in any plenty, but is scarce. I have found them on the rocks, at and near Matlock, in Derbyshire, about Bath, in Somersetshire, also on rocks; in Surrey, Wiltshire, and Hampshire, in the moss on the bodies of large trees, and in woods. Dr. Lister found them on the grass in Lincolnshire; Mr. Petiver, in hedges, between Charlton and Woolwich, in Kent*; Mr. Morton, in hedge-bottoms, in Oakly Parva, in Northamptonshire; and Mr. Wallis, on the rocks in Northumberland: but they are not common or frequent any where." page 56.

* Not uncommon last summer in the woods of Kent.





PLATE XL.

MYTILUS UMBILICATUS.

UMBILICATED, OR WRY BEAK MUSCLE.

GENERIC CHARACTER.

The hinge toothless, and consists of a longitudinal furrow.

SPECIFIC CHARACTER

AND

SYNONYMS.

Hinge much depressed and bent inwards.

MYTILUS UMBILICATUS, umbilicated. *Penn. Br. Zool. sp.* 76.
fig. 76.

MYTILUS CUROIROSTRATUS. WRY BEAK. *Da Costa Br. Conch.*
p. 220. 50.

We are informed by Pennant that this shell was discovered by the Reverend Hugh Davies; that it is a rare and new species, and is sometimes dredged up off Priestholme Island, Anglesea.

It is about half the size of *Mytilus Modiolus*, and in some respects resembles it; but is distinguished by the very remarkable and peculiar

PLATE XL.

structure of its hinge; the space opposite to it is bent inwards, in a winding manner, into a deep rugged cavity, which when the shells are closed, form a deep hollow, or umbilicus, as if bruised in. On one valve this depression is more deeply inflected inwards than on the other,



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PLATE XLI.

FIG. I.

TELLINA INÆQUIVALVIS.

UNEQUAL-VALVED TELLIN.

GENERIC CHARACTER.

The hinge usually furnished with three teeth; shell generally sloping
on one side.

SPECIFIC CHARACTER

AND

SYNONYMS.

Oblong, one side much produced or beaked; upper valve flat, lower
very convex.

TELLINA INÆQUIVALVIS: testa oblongo-rostrata, valva altera plana,
Gmel. Lin. Syst. Nat. Conch. 3233. *sp.* 23.

The *Tellina inæquivalvis* is noticed by *Gmelin* as a native of the Mediterranean and Norway seas, but has not been hitherto described as a British shell by any author. It is generally admitted by Conchologists that the species has been discovered on our shores, and William Pilkington, Esq. of Whitehall, has very lately received a specimen of it from the Guernsey coast, which he obligingly favoured us with it to figure and describe.

PLATE XLI.

FIG. II.

TELLINA VARIABILIS.

SPECIFIC CHARACTER.

Shell somewhat oval or oblong, radiated with pale red streaks ; a single tooth in the hinge of one valve, which is inserted between two teeth on the other valve, when shut.

SOLEN VESPERTINUS : testa ovali oblonga spadiceo-radiata, cardinis sinistrae valvæ dente solitario duplici alterius inserto.
Gmel. Lin. Syst. Conch. p. 3228. sp. 20.

This is the *Tellina variabilis* of the late Dr. *Solander*, and the *Portland Museum* ; *Gmelin* arranges it amongst the *Solens*.

Found on the coast of Cornwall and Weymouth, and not noticed by either *Pennant* or *Da Costa* as an English shell.





2



2



PLATE XLII.

FIG. I.

VENUS EXOLETA.

ANTIQUATED.

GENERIC CHARACTER.

Bivalve. Hinge furnished with three teeth; two near each other, the third divergent from the beaks.

SPECIFIC CHARACTER.

Subrotund. Wrought transversely with numerous regular and minute striæ, margins smooth.

VENUS EXOLETA: testa lentiformi transversim striata pallida, obsolete radiata, ano cordato. *Linn. Syst. Nat.* p. 1134. No. 142.

Concha testa subrotunda: striis transversis innumeris, margine lævi. *F. Suec.* 1, p. 383, No. 1342.

Pectunculus rostro productiore, capillaceis fasciis donatus. *List. II. Conch. tab.* 290. *fig.* 126.—P. dense fasciatus, ex rubro variegatus et undatus. *Tab.* 291. *fig.* 127.—P. crassus, dense fasciatus, leviter ex rufo variegatus. *Tab.* 292. *fig.* 128.—P. subfuscus tenuiter admodum fasciatus. *Tab.* 293. *fig.* 129. P. planus, crassus, ex rufo radiatus. *Tab.* 299. *fig.* 136.

Concha marina valvis æqualibus æquilatera, notabiliter umbonata et oblique incurvata, subrotunda, vulgaris, striis densissimis et profundis transversim striata et exasperata, candida leviter ex fusco variegata et radiata. *Gualt.* 1. *Conch. tab.* 75. *fig.* F.

PLATE XLII.

Venus exoleta, antiquated. *Penn. Br. Zool. No. 49. tab. 54. 55.*
49 & 49 *A.*

Pectunculus planus, crassus, striis capillaceis dense striatus. CAPILLACEUS; HAIR-STREAKED. *Da Costa. Brit. Conch. p. 187. sp. 24.—Tab. 12. fig. 5. 5.*

Found in plenty on several of the British shores, as Cornwall, Dorsetshire, Devonshire, and Yorkshire; also in the isle of Guernsey, and those of the Orkneys.

FIG. II.

VENUS SINUOSA.

A. INDENTED VENUS SHELL.

SPECIFIC CHARACTER.

Thin, convex, a deep obtuse *sinus*, or bending on the front. *Penn. Br. Zool. p. 95. sp. 51.*

Figured and described by Pennant, from a specimen in the Portland cabinet, that was found at Weymouth. The shell we have figured is in the collection of the Rev. T. Rackett.





PLATE XLIII.

CYPRÆA PEDICULUS.

SEA LOUSE COWRY, OR NUN.

GENERIC CHARACTER.

Sub-oval, blunt at the ends. Aperture, length of the shell, longitudinal, linear, toothed.

SPECIFIC CHARACTER

AND

SYNONYMS.

Convex, margined, and furrowed transversely across the back.

CYPRÆA PEDICULUS testa marginata transversim sulcata. *Linn Syst. Nat. p. 1180. No. 364.*

Concha veneris exigua, alba, striata, Nuns. *List. H. Conch. tab. 707. fig. 57.*

Concha veneris exigua purpascens, striis minimis transversis, tribus maculis fuscis dorso inspersa. The purple spotted nuns, *alias cowrie*, &c.—Concha veneris minima nullis maculis insignita. The smallest nuns without spots. *Borlase Cornw. p. 277. tab. 28. fig. 12. 13.*

Pou de Mer—*Argenv. Conch. 1. p. 310. tab. 21. fig. L. II. p. 270. tab. 18. fig. L.*

Porcellana vulgaris, parva, globosa, striata, candida, dorso sinuato. *Gualt. 1. Conch. tab. 14. fig. P. & tab. 15. fig. R.*

PLATE XLIII.

Cypræa pediculus, common. *Penn. Brit. Zool. No. 82. tab. 70.*
fig. 82.

Cypræa exigua transversim striata, *maculæ fuscae dorso inspersa.*
Pediculus, seu monacha. Da Costa Br. Conch.
p. 33. sp. 18. tab. 2. fig. 6. 6.

This shell is very common on our shores, and a variety of the same species is also abundant in the West Indies. The English shells of this kind are of various tints, generally whitish, and with or without spots; the exotic kind is distinguished by a furrow on the back.





PLATE XLIV.

VENUS VERRUCOSA.

WARTED VENUS SHELL.

GENERIC CHARACTER.

Bivalve. Hinge furnished with three teeth; two near each other, the third divergent from the beaks.

SPECIFIC CHARACTER

AND

SYNONYMS.

Somewhat heart shaped. Deeply decussated on the sides, with transverse and oblique furrows, which form membranaceous protuberances or warts. Margins finely crenated.

VENUS VERRUCOSA: testa subcordata: sulcis membranaceis striatis reflexis, antice imprimis, verrucosis, margine crenulato. *Linn. Syst. Nat. p. 1130. No. 116.*

Pectunculus omnium crassissimus, fasciis ex latere bullatis donatus. *List. H. Conch. tab. 284. fig. 122.*

Concha marina valvis æqualibus æqualiter, notabiliter umbonata et oblique incurvata, subrotunda, vulgaris, striis circularibus profundis, elatis, bullatis exasperata, et circumdata, crassa, subalbida. *Gualt. 1. Conch. tab. 75. fig. H.*

Concha cinerea densa, margine dentato, striis rugosis et é lateribus undose tuberculosus. The wrinkled, notched, and high-beaked concha, or cockle. *Borlase Cornw. p. 278. tab. 28. fig. 32.*

PLATE XLIV.

Clonisse de la Méditerranée d'Avila. *Cab. p. 333. No. 762.*

Venus Erycina, Sicilian. *Penn. Brit. Zool. No. 48. tab. 54. fig. 48.*

Cornwall heart cockle, with rugged girdles. *Petiv. Gazoph. tab. 93. fig. 17.*

Pectunculus crassissimus strigatus, strigis ex latere bullatis, strigatus, ridged. *Da Costa Br. Conch. p. 185. sp. 3. Tab. 12. fig. 1. 1.*

Da Costa says, "this species is rare in our seas. The shores of Cornwall afford them, and they have been got in Devonshire and Dorsetshire." They have also been found on the eastern coast of Sussex, but not frequently.



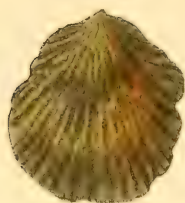


PLATE XLV.

OSTREA STRIATA.

STRIATED OYSTER.

GENERIC CHARACTER.

Animal a Tethys. Shell bivalve, unequal. Hinge without a tooth, having a small oval cavity.

SPECIFIC CHARACTER

AND

SYNONYMS.

Less than the common Oyster. Outside wrought with thread-like longitudinal ridges. Inside green.

OSTREUM STRIATUM: mediæ magnitudinis veluti striatum intus virescente. *Da Costa. pl. 11. fig. 4. 4. p. 162. sp. 9.*

Ostreum parvum veluti striatum, testa intus virescente, cardine utrinque canaliculato. *List. H. An. Angl. p. 181. tit. 27. tab. 4. fig. 27.*

Ostrea fere circinata, subviridis, leviter striata. *List. H. Conch. tab. 202. 203. fig. 36. 37.*

An Ostreum vulgare, striatum, striis rotundis, crassioribus, interruptis radiatum, squamosum ex fusco viridescens. *Gualt. 1. Conch. tab. 102. fig. B?*

PLATE XLV.

“ This Oyster,” says Da Costa, “ hitherto *only proposed* and described by Dr. *Lister*, is a very different species from the *common Oyster*, but has been always overlooked as the same kind.” Dr. *Lister* observes that it is found in plenty at the mouth of the river *Tees*, in Yorkshire, and says he first eat of it at *Bourdeaux*, in France, where it is greatly esteemed and called Rock Oyster, being found among the rocks,

The figure of this shell in the plate of Da Costa above quoted, is so very indifferent and devoid of true character, that were we not in possession of the specimen he represents, it would be difficult to ascertain it. In the general description he says the outside is a little uneven, *but not rugged* nor of a *leaved or flakey structure* as the common Oyster: he adds that the ridges are longitudinal, about the thickness of a thread, very numerous, irregular, and run one into another; but towards the bottom always furcate or divide. This description is accurate but does not accord with the figure, in which the longitudinal ridges appear of a flakey structure or like laminæ, and not numerous, irregular threadlike striæ as in the shell. We have selected several characteristic specimens of this species in the annexed plate,

This shell is thick, strong, and nearly opaque: it is usually about an inch in diameter; the valves unequal, the under one being very concave, the upper one flattish. Within, it is of a livid green and rather glossy, the hinge broad, deep, somewhat triangular and striated transversely. In many shells there is a remarkable white mark exactly resembling a thick spot of white oil paint, placed a little below the hinge, this spot always appears in radiated wrinkles from the centre, and is formed by the muscle of the shell,

PLATE XLV.

It is found on many of our shores, as Kent, Sussex, Dorsetshire, &c. in abundance, and of various colours; some are very fine like japan lacquer, and others of a violet, green, pink, yellow or pearly tint when much worn. It is remarkable, however, that the upper valves are so scarce, that hundreds of the lower valves are found to one of them.





PLATE XLVI.

SOLENI SILIQUA.

LARGE OR POD SOLEN.

GENERIC CHARACTER.

Bivalve, with equal valves, oblong, open at both ends. At the hinge a subulated tooth turned back, often double; not inserted in the opposite shell. Animal an Ascidia.

SPECIFIC CHARACTER

AND

SYNONYMS.

Shell strait, equally broad, and compressed. The hinge beset with two teeth in each valve.

SOLENI SILIQUA: testa lineari recta cardine altero bidentato. *Linn. Syst. Nat. p. 1113. No. 34:—Fn. Sv. 2. No. 2131.*

Solen, lævis, albidus, candidus, ex fusco & subroseo colore variegatus et fasciatus. *Gualt. 1. Conch. tab. 95. fig. C.*

Concha fusca, longissima, angustissimaque, musculo ad cardinem nigro, quibusdam solen dicta. *List. H. An. Angl. p. 192. tit. 37. tab. 5. fig. 37.—App. H. An. Angl. p. 19.—App. H. An. Angl. Goedart, p. 33.*

PLATE XLVI.

Solen major, subfuscus, rectus. *H. Conch. tab. 409. fig. 255.*

Solen unguis; the sheath, razor, or spoutfish. *Grew Mus. p. 143.*

—*Merret Pin. p. 193.*

Solen sive concha tenuis longissimaque ab utraque parte naturaliter hians; the spout fish. *Wallace Orkneys, p. 45.*

Solen nostras vulgaris. *Muf. Petiv. p. 87. No. 844.*

Solen major subfuscus rectus. *SILIQUA. Da Costa. tab. 17. fig. 5, p. 235. sp. 59.*

This shell is found in abundance on many of the English shores, especially the northern and western coasts, and those of Scotland and Ireland.

The antients esteemed this fish a delicious food, and Dr. Lister informs us he thought it nearly as rich and palatable as the Lobster. In England and Scotland it is at present mostly used for baits, and not for the table; but in Ireland is much eaten in Lent.—It is in season in spring.

From the hinge to the opposite margin the length is about half an inch, and its breadth from five to seven inches; but some shells are found much larger. The outside is covered with a thin transparent yellow-brown cuticle or epidermis, like glue, which peels off soon after the fish is dead or exposed to the shores. Under this epidermis the shell is smooth, very glossy, and marked with many concentric transverse wrinkles from the middle to one extreme, the other half is striated lengthways. Inside white and glossy.

PLATE XLVI.

DA COSTA OBS.—Mr. Wallis, in his History of Northumberland, p. 396. No. 9. notes a sort of this shell he calls the *Orange and White Solen*, found in *Budle Sands* with this *common sort*, and in *all respects like it, except in colour*, which is deep orange and white in transverse fillets, in alternate variegations. *Quere, if a distinct species, or only a variety?*





PLATE XLVII.

TELLINA CARNARIA. *Linn.*

FLESH-COLOURED TELLEN.

GENERIC CHARACTER.

The hinge usually furnished with three teeth; shell generally sloping on one side.

SPECIFIC CHARACTER.

Somewhat orbicular; valves shallow. White tinged with rose colour, and marked externally with numerous parallel striæ, disposed in an oblique, reflexed and transverse direction.

TELLINA CARNARIA: testa suborbiculata lævi utrinque incarnata oblique striata: striis hinc reflexis. *Linn. Syst. Nat. p. 1119. No. 66.*

Concha parva subrotunda, ex parte interna rubens. *List. II. An. Angl. p. 175. tit. 25. tab. 4. fig. 5.*

Tellina æquilatera lævis, tenuis subrubra. *Gualt. 1. Conch. tab. 77. fig. 1.*

Cardium parvum subrotundum oblique striatum colore carneo. Carneosum. *Da Costa. p. 181. sp. 20.*

PLATE XLVII.

According to Dr. Lister this species is a shore shell, and found very frequently in the shallows of Lancashire, and near Filey in Yorkshire, &c. It is also found at Scarborough, Dorsetshire, Devonshire, and Cornwall.

It is an elegant shell, the outside being beautifully marked with numerous delicate striæ like strokes of engraving, and tinged with a fine rose or flesh colour. Some specimens are almost white, or white with transverse bands of deeper red, and the margins yellow. Within, the red colour is much more vivid than the outside.

Da Costa has placed this species in the *Cardium* genus, and indeed with much propriety; though Linnæus arranges it amongst the *Tellens*. It has a tendency on one side to flexure or slope like the *Tellens*, but the central and remote lateral teeth we think should remove it to the former genus.





PLATE XLVIII.

DENTALIUM ENTALIS.

TOOTH SHELL.

GENERIC CHARACTER.

Animal a Terebella. Shell slender, tubiform.

SPECIFIC CHARACTER

AND

SYNONYMS.

Tubular, conical, somewhat curved, and open at both ends.

DENTALIUM ENTALIS: testa tereti subarcuata continua lævi.

Linn. Syst. Nat. p. 3736. 332. sp. 3. a Gmel.

Dentale læve album, altera extremitate rufescens. *List. II. Conch.*

tab. 547. fig. 2.

Tubulus marinus regulariter intortus arcuatim incurvatus, & versus unam extremitatem acuminatus, dentalis dictus, lævis, candidus. *Gualt. 1. Conch. tab. 10. fig. E.*

Dentale læve, curvum album. *Borlase Cornw. p. 276. tab. 28. fig. 5.*

PLATE XLVIII.

ANTALES *Argenville Conch.* 1. p. 246. *tab.* 7. *fig.* K. *II.* p. 196.
tab. 3. *fig.* K.

Dentale læve albescens. Vulgare. *Da Costa. Br Conch.* p. 24.
tab. 2. *fig.* 10.

This singular shell is found on many of the British shores, but rarely occurs perfect. It is abundant on our southern shores, as Hampshire, Devonshire, &c.





PLATE XLIX.

OSTREA MAXIMA.

GREAT SCALLOP.

GENERIC CHARACTER.

Animal a Tethys. Shell bivalve, unequal. Hinge without a tooth, having a small oval cavity.

SPECIFIC CHARACTER

AND

SYNONYMS.

Upper valve flat, lower concave. About fourteen rounded longitudinal ribs, which are also deeply striated.

OSTREA MAXIMA: testa inæquivalvi radiis rotundatis longitudinaliter striatis. *Linn. Syst. Nat. p. 1144 No. 185.*

Concha testa aurita, striis quatuordecim. *Linn. F. Suec. I. p. 383. No. 1343. II. 2148:*

P. maximus; circiter quatuordecim striis, admodum craffis & eminentibus et iisdem ipsis striatis insignitus. A Scallop. *List. H. An. Angl. p. 184. tit. 29. tab. 5. fig. 29.*

Escallop, or Scallop. *Merret. Pin. 193.*

Scallop or Clam-shell. *Wallace Orkn. p. 43. &c.*

PLATE XLIX.

Frill or Scallop. *Hutchins Dorset. p. 77.*

Pecten Maximus. Great. *Penn. Br. Zool. No. 61. tab. 59. fig. 61.*

Pecten. Maximus inæquivalvis, costis circiter quatuordecim rotundatis, & admodum crassis. Vulgaris, the common scallop. *Da Costa Br. Conch. p. 140. tab. 9. fig. 3. 3.*

The large Escallop is found on most of the coasts of Great Britain and Ireland, particularly on those of Portland and Purbeck in Dorsetshire.—The fish is eaten and much esteemed.

It is said by modern, as well as antient authors, that Escallops will move so strongly as to leap out of the catcher wherein they are taken: their way of leaping or raising themselves up, is by forcing the under valve against whatever they lie upon.





PLATE L.

SOLENSIS.

SCYMETAR.

GENERIC CHARACTER.

Bivalve, with equal valves, oblong, open at both ends. At the hinge a subulated tooth turned back, often double; not inserted in the opposite shell.—Animal an Ascidia.

SPECIFIC CHARACTER

AND

SYNONYMS.

Shell bowed like a Scymetar, equally broad and compressed. The hinge beset with two teeth in each valve.

SOLENSIS: testis lineari subarcuata, cardine altero bidentato.
Linn. Syst. Nat. p. 1114. No. 35.

Solen alter curvus minor. *List. App. H. An. Angl. p. 20.—App. in Goed. p. 36. tab. 2. fig. 9.—Solen curvus. Hist. Conch. tab. 411. fig. 257.—SOLENSIS, SCYMETAR. Penn. Br. Zool. No. 22. tab. 45. fig. 22.*

Solen subarcuatus. *Ensis. Da Costa. Br. Conch. p. 257. sp. 60.*

PLATE L.

This is a local and rare species ; it has been found at Weymouth on the Dorsetshire coast, and according to Dr. Lister in plenty in the *æstuary* of the Severn, on the side of Wales.

It differs from the *Solen siliqua* in several respects ; it is smaller, and not strait, but curved or bowed like a Scymetar.





PLATE LI.

FIG. II.

HELIX AURICULARIA.

EAR, OR WIDE MOUTH RIVER SNAIL.

GENERIC CHARACTER.

Aperture of the mouth lunated.

**** *Ovated, imperforated.*

SPECIFIC CHARACTER

AND

SYNONYMS.

Without umbilicus: a narrow depression on the edge of the pillar lip. Very ventricose, spire short and acute. Aperture very wide.

HELIX AURICULARIA: testa imperforata ovata obtusa, spira acuta brevissima, aperturā ampliata. *Linn. Syst. Nat.* p. 1250. No. 708.

Cochlea testa diaphana anfractibus quatuor, mucrone acuto brevissimo, apertura acutissima. *Linn. F. Succ. I.* p. 376. No. 1315. *II.* No. 2192.

Buccinum pellucidum subflavum, quatuor spirarum. mucrone acutissimo, testæ apertura omnium maxima. *List. H. An. Angl.* p. 139. tit. 23. tab. 2. fig. 23.

PLATE LI.

Buccinum subflavum pellucidum, quatuor orbium, ore amplissimo, mucrone acuto. *List. II. Conch. tab. 123. fig. 22.*

Buccinum fluviatile pellucidum, subflavum, quatuor spirarum, mucrone acuto, testæ apertura patentissima. *List. Exerc. Anat. 2. p. 54.*

Turbo with four wreaths, a remarkable large mouth, and a short acute apex. *Wallis Northumb. p. 370.*

Helix auricularia. *Penn. Br. Zool. No. 138. tab. 86. fig. 138.*

Turbo subflavus pellucidus quatuor spirarum ore patulo. Patulus. *Da Costa sp. 53. p. 95. tab. 6. fig. 17.*

Found in plenty in rivers, ponds, &c.

FIG. II.

HELIX STAGNALIS,

LAKE SNAIL, OR FRESH WATER TURBO.

SPECIFIC CHARACTER

AND

SYNONYMS.

Without umbilicus. Oblong; spire tapering. Several prominent longitudinal wrinkles which somewhat angulates the shell. Aperture oblong oval.

PLATE LI.

HELIX STAGNALIS: testa imperforata ovata-subulata, subangulata, apertura ovata. *Linn. Syst. Nat. p. 1249. No. 703.*

Cochlea testa producta acuminata, opaca, anfractibus senis subangulatis, apertura ovata. *Linn. F. Suec. I. p. 374. No. 1310. II. No. 2188.*

Buccinum longum sex spirarum, omnium & maximum & productius, subflavum, pellucidum, in tenue acumen ex amplissima basi mucronatum. Turbo lævis in stagnis degens. *Aldror. de Testaceis, I. 3. p. 359. No. 3.*

Buccinum subflavam pellucidum, sex orbium, clavicula admodum tenui, productiore. *List. H. Conch. tab. 123. fig. 21.*

Buccinum minus fuscum, sex spirarum, ore angustiore. *List. II. An. Angl. p. 139. tit. 22. tab. 2. fig. 22.*

Helix Stagnalis. *Lake. Penn. Br. Zool. No. 136. tab. 86. fig. 136.*

Fresh water turbo with six wreaths. *Wallis Northumb. p. 369.*

Turbo longus et gracilis in tenue acumen mucronatus, imperforatus & pellucidus Stagnalis. *Da Costa Br. Conch. p. 93. sp. 52. tab. 5. fig. 11.*

The largest and most produced of the British river snails, and is found in plenty in all our rivers, lakes, ponds, and other waters.

Lister and Petiver have made two species of this shell maximum and minus; they appear however to be merely different stages of its growth.



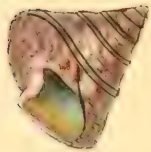
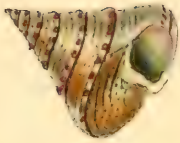


PLATE LII.

TROCHUS ZIZYPHINUS.

LIVID TOP SHELL.

GENERIC CHARACTER.

Animal a slug. Shell conic. Aperture nearly triangular.

SPECIFIC CHARACTER

AND

SYNONYMS.

Shell conic, livid, without umbilicus: spirally striated, with the upper edge of each wreath margined.

TROCHUS ZIZYPHINUS: testa imperforata conico livida lævi, anfractibus marginatis. *Linn. Syst. Nat. p. 1231. No. 599.—Faun. Suec. II. No. 2168.*

Trochus albidus maculis rubentibus distinctus, sex minimum spirarum. *List. H. An. Angl. p. 166. tit. 14. tab. 3. fig. 14.*

Trochus pyramidalis variegatus, limbo angusto in summo quoque orbe circumdatus. *List. H. Conch. tab. 616. fig. 1.*

Culs de Campe de moyenne grandeur, lisses, marbrés de rouse et de violet, à orbes séparés par un cordon. *D'Avila, cab. p. 127. No. 155.*

PLATE LII.

Trochus Ziziphinus, livid. *Penn. Br. Zool.* No. 103. *tab.* 80.
fig. 103.

Trochus pyramidalis imperforatus, lividus, rubro variegatus, limbo
in summo quoque orbe circumdatus. *Zizyphinus*,
Da Costa Br. Conch. *tab.* 3. *fig.* 2. 2. *p.* 37.

This is one of the most elegant of the testaceous tribe found on our coasts; the colour in general is flesh colour or pale red, elegantly variegated with deeper red or brown in streaks, waves, and chequers; when the exterior coat is worn, the shell is of a fine pearly hue.

It is not an uncommon species on the English shores, and is also found in the Orkneys and the western isles of Scotland.



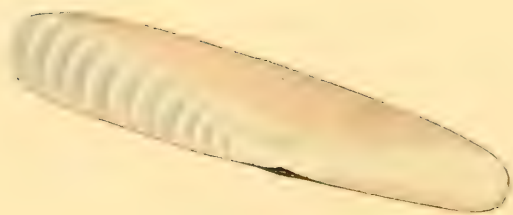


PLATE LIII.

SOLENI LEGUMEN.

PEASECOD.

GENERIC CHARACTER.

Bivalve, with equal valves, oblong, open at both ends. At the hinge a subulated tooth turned back, often double; not inserted in the opposite shell. Animal an ascidia.

SPECIFIC CHARACTER

AND

SYNONYMS.

Strait, oblong, rounded at both ends: smooth, and somewhat pellucid.

SOLENI LEGUMEN: curtus subpellucidus, ad chamas quodammodo accedens. Peasecod. *Da Costa. Br. Conch.* p. 238. sp. 61.

Solen Legumen, Suboval. *Penn. Br. Zool. No. 24. tab. 46. fig. 24.*
Concha soleniformis, lævis aut levissime striata, fragilis, pellucida, testa tenuissima cornea, subalbida, aliquando flavescens. *Gualt. 1. Conch. tab. 91. fig. A.*

Chama subfusca, angustissima, ad solenes quodammodo accedens. *List. II. Conch. tab. 420. fig. 264.*

PLATE LIII.

Both Pennant and Da Costa note this as a very rare British species. The first says it is found at Red Wharf, Anglesea, in North Wales; the latter received it from Christchurch, in Hampshire.

We have found it on the shores of Glamorganshire, and also in abundance in the sandy bay of Caermarthen this summer.





PLATE LIV.

CARDIUM LÆVIGATUM.

LARGE HIGH-BEAKED COCKLE.

GENERIC CHARACTER.

Two teeth near the beak, and another remote one on each side of the shell.

SPECIFIC CHARACTER

AND

SYNONYMS.

Shell somewhat oval, slightly striated longitudinally.

CARDIUM LÆVIGATUM: testa obovata: striis obsoletis longitudinalibus. *Gmel. Linn. Syst. Nat. p. 3251. sp. 18.*

Pectunculus maximus, at minus concavus; plurimis minutioribus & parum eminentibus striis donatus, rostro acuto, minusque incurvato. *List. H. An. Angl. p. 187. tit. 32. tab. 5. fig. 32.*

Pectunculus subfuscis striis leviter tantum incis. *List II. Conch. tab. 332. fig. 169.*

Pectunculus major striis angustis. *Petiv. Gaz. tab. 93. fig. 10.*

Large high-beaked Cockle. *Wallis Northumb. p. 395.*

Cardium Lævigatum. Smooth. *Penn. Br. Zool. No. 40. tab. 51. fig. 40.*

Cardium obovatum striis obsoletis longitudinalibus. LÆVIGATUM. *Da Costa. Br. Conch. p. 178. sp. 18.*

PLATE LIV.

We have observed, that this species is in general discoloured, and deeply tinged with brown or yellow ; when fine it is whitish, sleek, and covered with an epidermis.

It is found on most of our coasts, yet it is by no means common. Da Costa notes it from Yorkshire, Northumberland, Dorsetshire, Cornwall, Carnarvonshire, and the Orkneys.





PLATE LV.

MYTILUS CYGNEUS.

GREAT HORSE, OR SWAN MUSCLE.

GENERIC CHARACTER.

The hinge toothless, and consists of a longitudinal furrow.

SPECIFIC CHARACTER

AND

SYNONYMS.

Somewhat oval, one end rounded, the other extended, narrow, and compressed; thin and brittle.

MYTILUS CYGNEUS: testa ovata anterieus compressiuscula fragilissima, cardine laterali. *Gmel. Linn. Syst. Nat. p. 3355. 15.*

MYTILUS CYGNEUS: concha testa oblonga ovata longitudinaliter subrugosa, postice compresso-prominulo. *Linn. Fn. Succ. 1. p. 380. No. 1332.*

Musculus latus maximus, testa admodum tenui, ex fusco viridescens, palustris. *List. App. H. An. Angl. p. 8. tit. 30. tab. 1. fig. 3. and App. II. An. Angl. in Goedart. p. 9. tit. 30. tab. 1. fig. 3.*—Musculus latus maximus & tenuissimus é cœruleo viridescens, fere palustris. *H. Conch. tab. 156. fig. 11.*

PLATE LV.

Musculus fluviatilis maximus, profunde striatus latus ; testa admodum tenui, ex fusco viridescens, interdum rufescens, intus argenteus. *Gualt. 1. Conch. tab. 7. fig. F.*

Mytilus Cygneus. Swan. *Penn. Brit. Zool. No. 78. tab. 67. No. 78.*

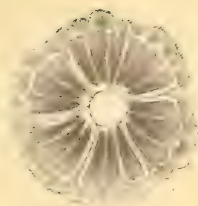
Mytilus fluviatilis maximus, admodum tenuis ex fusco viridescens.
CYGNEUS. Da Costa Br. Conch. p. 214. sp. 46.

This species is not uncommon in our Rivers, Ponds, &c. but is less frequent than the *Mytilus Anatinus*, or Small Horse Muscle, which bears some resemblance to it. *Mytilus Anatinus* is rarely more than half the size of *Mytilus Cygneus*, is more compressed, and has the cartilage side extended in a straight line to an acute angle at one end.

The usual length of *Mytilus Cygneus* is about two or three inches, its breadth five or six inches. The valves deep, or concave. The outside is wrinkled transversely, and varies in colour according to the state of the Shell. The external covering, or epidermis, is thin, but strong, and of a greenish colour ; under this the Shell is varied with bright brown, and when the coating is worn off, the whole Shell is pearly. The inside is often rugged with small pearls.



2



1



3



PLATE LVI.

LEPAS DIADEMA.

WHALE ACORN SHELL.

GENERIC CHARACTER.

Animal Triton. Shell of many unequal valves ; affixed by a stem:

SPECIFIC CHARACTER

AND

SYNONYMS.

Shell subrotund, of six lobes, furrowed longitudinally.

LEPAS DIADEMA: testa subrotunda, sexlobata sulcata. *Gmel.*

Linn. Syst. Nat. p. 3208. sp. 4.

Balanus balænxæ cuidam Oceani Septentrionalis adhærens. *List. H.*

Conch. tab. 445. fig. 288.

Pediculus ceti. *Phil. Trans. No. 222. p. 323. Epitome Trans.*

Soc. R. Angl. Vol. 5, p. 381. tab. 17. fig. 2.

Pediculus ceti, vel Lepas nuda carnosæ aurita. *Idem. 1758. Vol. 50.*

P. 2. tab. 34. fig. 1, and fig. 7.

Martin. *West. Isles, p. 162 and 166.*

Quarta species echini plani. *Rumph. Mus, tab. 14. fig. H.*

Balanus balænaris. *Klein. Ostrac. 176. tab. 12. fig. 98.*

Pediculus ceti. *Boccon. recher. p. 287.*

Grand pou de Baleine. *D'Arvil, Cab. p. 404.*

Balanus hemisphericus sexlobatus. Balænxæ. *Da Costa Br. Conch.*

tab. 17. fig. 2. 2. 2.

PLATE LVI.

This large and interesting species of Balani is found adhering to the Whale, whence it is called the Whale Acorn Shell. It is not uncommon in the sea round Scotland. The natives of some of the Western Islands distinguish one species of Whale from the rest, for its great size, and the *big limpets* growing on their backs *. The same species is common on the Whales in the Northern Seas about Newfoundland.

The Animal is figured by Ellis, in the Philosophical Transactions for 1758, and resembles a cluster of small hooded and eared serpents issuing from the central cavity, and little openings at the tops of the longitudinal ribs. The base by which it is affixed, when alive, is covered with a coriaceous skin.

* Martin. Fladda Chuan, near the Isle of Skie.



PLATE LVII.

VOLUTA TORNATILIS.

OVAL VOLUTE.

GENERIC CHARACTER.

Animal Limax. Shell spiral, aperture narrow, without a beak, Columella plicated.

SPECIFIC CHARACTER

AND

SYNONYMS.

Shell oval, pointed at each end, and striated spirally. Pillar lip turned in a fold.

VOLUTA TORNATILIS: testa coarctata ovata substriata: spira elevata acutiuscula, columella uniplicata. *Gmel. Linn. Syst. p. 3437.*

Buccinum parvum, rostro integro, tenuiter striatum, fasciatum, clavicula paulo productiore, unico dente ad columellam. *List. II. Conch. tab. 835. fig. 53.*

Auris Midæ fasciata. *Klein Ostrac. p. 37. §. 96. sp. I. No. I.*

Voluta tornatilis. Oval. *Penn. Br. Zool. No. 86. tab. 71. fig. 86.*
Schroet. n. Litterat. 3. t. 2. f. 12. 13.

Ovalis. Turbo ovalis striatus rubicundus fasciis albis, columella uniplicata & unidentata. *Da Costa Br. Conch. p. 101. tab. 8. fig. 2. 2. sp. 57.*

PLATE LVII.

“ This pretty species,” says Da Costa, “ I have received from Timmouth and Exmouth, in Devonshire ;” and Pennant notes it from Anglesea only.



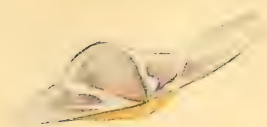


PLATE LVIII.

MACTRA LUTRARIA.

GENERIC CHARACTER.

Animal a Tethys. Bivalve, sides unequal. Middle tooth complicated, with a little groove on each side; lateral teeth remote.

SPECIFIC CHARACTER

AND

SYNONYMS.

Shell oblong oval, smooth; no lateral teeth. Hinge, a small and large triangular cavity in one valve, a similar cavity and an elevated triangular tooth in the opposite.

MACTRA LUTRARIA: testa ovali oblonga lævi, dentibus lateralibus nullis. *Gmel. Linn. Syst. p. 3259. sp. 14.*

Concha longa lataque in mediis cardinibus cavitate quadam pyriformi insignita.—An Chamæ glycymeris Rondeletii? *List. H. Angl. p. 170. tit. 19. tab. 4. fig. 19.*—*Chama fusca lata planior. Hist. Conch. tab. 415. fig. 259.*

The long and broad conch. *Wallis Northumb. p. 396. No. 10. 11.*

Mactra lutraria, large. *Penn. Br. Zool. No. 44. tab. 52. fig. 44.*

Chemnitz. Conch. 6. t. 24. f. 240. 241.

Chama magna planior, crassa, albescens, Magna. *Da Costa Br. Conch. p. 230. sp. 55. tab. 17. fig. 4.*

PLATE LVIII.

The *Mactra lutraria* is so very similar in general appearance to the *Mya Arenaria*, that without attending to the foliated hinge of the latter, they may be confounded with each other. Both shells are scarce on the British coasts, except in certain situations. Da Costa says the *Mactra lutraria* is found in plenty at Scarborough, in Northumberland, Lancashire, &c. and on the shores of Scotland. Dr. Maton found them on the coast of Cornwall; and we met with them very fine, perfect, and beautifully coloured, on the sands near Laugharn, South Wales.

The general colour is yellowish, tinged with orange, and irregularly clouded with brown; and often glossed with a delicate white; the epidermis brown.



PLATE LIX.

TURBO STRIATUS.

STRIATED WREATH SHELL.

GENERIC CHARACTER.

Animal Limax. Univalve, spiral, or of a taper form. Aperture somewhat compressed, orbicular, entire.

SPECIFIC CHARACTER

AND

SYNONYMS.

Shell swelled, or ventricose, white, variegated with red, and finely striated spirally. Umbilicated.

TURBO STRIATUS: albescens rufo variegatus, eleganter striatus.

Da Costa. Br. Conch. p. 86. sp. 47. tab. 5. fig. 9.

Turbo reflexus: testa umbilicata convexo-prominula: anfractibus

teretibus substriatis, apertura reflexa. *Gmel.*

Linn. Syst. Nat. p. 3605. 70?

Cochlea cinerea, interdum leviter rufescens, striata, operculo testaceo cochleato donata.—Cochlea terrestris turbinata

et striata Columnæ de purpura. *c. 9. p. 18. ubi etiam delineatur sub hoc titulo, Cochlea turbinata.*

List. H. An. Angl. p. 119. tit. 5. tab. 2. fig. 5.

Turbo lunaris tessellatus et striatus. *Klein Ostrac. p. 55. §. 161.*

spec. 3.

PLATE LIX.

Argenv. Conch. *I.* p. 384. *tab.* 32. *fig.* 12. *II.* p. 339. *tab.* 28.
fig. 12.

Turbo terrestris tenuissime, ipso ore circinato, cui etiam limbus latus,
et striatus, albidus, *Gualt I. Conch. tab.* 4. *fig.* B.

Turbo tumidis. Tumid. *Penn. Br. Zool. No.* 110. *tab.* 82. *fig.* 110.

This species is particularly noticed by most conchologists. Dr. Lister says it is the most elegant of all our snails, and is found near Oglethorpe and Burwell woods in Lincolnshire, in Yorkshire, and in Kent. Petiver found it about Charlton, in Kent; also Morton, in Northamptonshire; Pennant, in the woods of Cambridgeshire; and Da Costa, in Surrey. It is no where common.

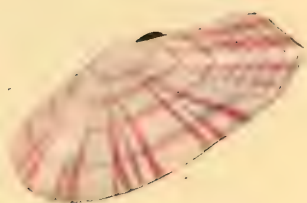


PLATE LX.

TELLINA TRIFASCIATA.

THREE STREAK TELLEN.

GENERIC CHARACTER.

The hinge usually furnished with three teeth; shell generally sloping on one side.

SPECIFIC CHARACTER.

Shell narrow oval, depressed, whitish, radiated with red; and striated transversely.

TELLINA TRIFASCIATA : testa ovata læviuscula sanguineo triradiata, pube rugosa. *Gmel. Linn. Syst. Nat. p. 3233.*

Tellina ex rufo maculata, fasciis exasperata. *List. II. Conch. tab. 394. fig. 241.*

Concha rugosa, tellinæ formis, lincola quadam paululum eminente ab ipso cardine ad imum ambitum donata. *List. App. Hist. An. Angl. p. 19. tit. 36. tab. 1. fig. 8.—App. Hist. An. Angl. in Gædart. p. 32. tit. 36. tab. 1. fig. 8.*

Tellina cuneata compressa, e rubro radiata. Red Waved Bastard Tellen. *Petiv. Gazoph. tab. 94. fig. 9.*

Tellina depressa transversim striata albescens e rubro radiata, Radiata. *Da Costa. Br. Conch. p. 209. sp. 42. tab. 14. fig. 1.*

Tellina incarnata, carnation. *Penn. Br. Zool. No. 31. tab. 47 fig. 31.*

PLATE LX.

This elegant species is rather uncommon upon our coasts. De Costa says he received it from Scarborough, in Yorkshire ; and adds, it is scarce on the coasts of Cornwall, but of a larger size ; the finest coloured specimens we have seen are from Dorsetshire and Wales.

The *Tellina incarnata* is smaller than *trifaciata* but very similar, and may be easily confounded with it.

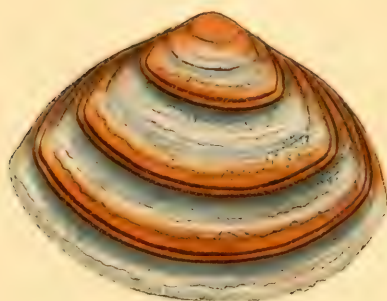


PLATE LXI.

MACTRA SOLIDA.

GIRDLED.

GENERIC CHARACTER.

Animal a Tethys, Bivalve, sides unequal. Middle tooth complicated, with a little groove on each side ; lateral teeth remote.

SPECIFIC CHARACTER

AND

SYNONYMS.

Thick, transversely striated and girdled.

MACTRA SOLIDA: testa opaca læviuscula subantiqua. *Gmel. Linn. Syst. Nat. p. 3259. sp. 13.*

Concha crassa, ex altera parte compressa, ex altera subrotunda.
List. H. An. Angl. p. 174. tit. 24. tab. 4. fig. 24.—Pectunculus crassiusculus albidus. *List. H. Conch. tab. 253. fig. 87.*

Chama media fasciata crassa *Petiv. Gaz. tab. 94. fig. 7.*

Chama minor plurimis fasciis. *Id. ib. fig. 6.*

A Pectunculus with azurine circular lines interpolated. *Leigh. Lancashire. tab. 3. fig. 6.*

Thick white striated Chama. *Wallis Northum. p. 395.*

PLATE LXI.

Mactra solida ; strong. *Penn. Br. Zool. No. 43. tab. 51. fig. 43.*
A. et tab. 52. fig. 43.—Chemnitz. Conch. 6. t.
23. f. 229. 230.

Trigonella crassa transversim fasciata. ZONARIA. *Da Costa. Br.*
Conch. tab. 15. fig. 1. 1.

This species is found on many of our shores, as Kent, Dorsetshire, Lancashire, Yorkshire, Northumberland, the coast of Wales, &c.

The girdles are most prominent in the dead shells ; the surface between them appearing much worn.



PLATE LXII.

PHOLAS CRISPATA.

CURLED, OR DOUBLE-FRONTED PIDDOCK.

GENERIC CHARACTER.

Animal Ascidia. Shell bivalve, opening wide at each end, with several lesser valves at the hinge. The hinges folded back and connected by a cartilage.

SPECIFIC CHARACTER

AND

SYNONYMS.

Shell oval, thick, wrought with transverse wrinkles, and divided down the middle by a furrow. The half next the hinge undulated or indented. A large flat curved tooth in the cavity under the beak.

PHOLAS CRISPATA : testa ovali hinc obtusiore crispato striata cardinis dente curvo. *Linn. Faun. Suec.* 2125.
Gmel. Linn. Syst. p. 3216. *sp.* 6.

Concha altera parte dimidia striis undatim crispatis donata, altera lævis, apophysi longâ, angusta, recurva, dentiformi. An é peloridibus antiquorum? *List. H. An. Angl. p.* 192. *tit.* 38. *tab.* 5. 38.—*Pholas angulosus*, nobis olim, concha altera, &c. *Tit.* 38.—*App. H. An. Angl. in Goedart. p.* 36. *tab.* 2. *fig.* 7.—*Pholas latus rugosus ex dimidio dorso et asper.* *Hist. Conch. tab.* 279. *fig.* 436.

PLATE LXII

Concha ex dimidia pene margine profunde striata. *Merret Pin.*
p. 194.

Chamæ pholas bifrons. Furrow-ribbed Pholas Muscle. *Petiver*
Gaz. tab. 79. *fig.* 13.

Pholas Crispatus. Curled. *Penn. Br. Zool. No.* 12. *tab.* 40.
fig. 12.

Pitaut, ou Dail Pholade. *Argenv. Conch.* 1. *p.* 365. *pl.* 30. *p.* 322.
26. H.

Pholas ovalis, parte dimidia striis undatim crispatis, altera lævis; dens
longus angustus curvus. Bifrons. *Da Costa Br.*
Conch. p. 242. *tab.* 16. *fig.* 4. 4.

Found in great abundance on many of our shores, nitched or bur-
rowed in the rocks and stones in Cornwall, Lincolushire, Yorkshire,
Wales, &c.



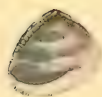


PLATE LXIII.

ARCA NUCLEUS.

SILVERY ARK.

GENERIC CHARACTER.

Animal Tethys? Shell bivalve, equivalve. Teeth of the hinge numerous, inserted between each other.

SPECIFIC CHARACTER

AND

SYNONYMS.

Small, somewhat triangular, smooth, silvery within. Hinge semi-circular, beset with numerous plate-like teeth. Margin finely crenated

ARCA NUCLEUS : testa oblique ovata læviuscula, natibus incurvis, margine crenulato, cardine arcuato. *Linn. Syst. Nat. p. 1143. No. 184.*

ARCA NUCLEUS : testa oblique ovata læviuscula : cardine triangulari. *Gmel. Linn. Syst. Nat. p. 3314. sp. 38.*

Tellina inæquilatera, margine interno minutissime dentato, sed prope cardinem denticulis spissis, elatoribus, acutis, conspicua, oleagina, intus argentea. *Gualt 1. Conch. tab. 81. fig. R.*

PLATE LXIII.

Pectunculus minimus lævis, intus argenteus, cardine serrato. Silver
Cockle. *Mus. Petiv. p. 87. No. 841. et Gazop.*
tab. 17. fig.

Glycemeris Argentea parva subtriangularis, lævis, intus argentea.
Da Costa. Br. Conch. p. 170. sp. 13. tab. 15.
fig. 6. right hand.

This kind is found in great abundance on many of our shores, as Kent, Essex, Sussex, Devonshire, &c. and is also met with at Scarborough.

When these shells are fresh and perfect, says Da Costa, the outside is of an olive green, with some few transverse wrinkles; but when rubbed or worn are quite white, and almost smooth. The inside is of a fine silvery colour.





PLATE LXIV.

FIG. I.

TELLINA PLANA.

FLAT TELLEN.

GENERIC CHARACTER.

The hinge usually furnished with three teeth. Shell generally sloping on one side.

SPECIFIC CHARACTER

AND

SYNONYMS.

Somewhat triangular, thin, and flat.

TELLINA PLANA: tenuis subrotunda plana.

TRIGONELLA PLANA. *Da Costa. p. 200. sp. 36.*

Tellina crassa. Flat. No. 28.—Venus borealis. *Northern. Pen. Br. Zool. No. 52.*

Venus borealis. *Linn. Syst. Nat.?*

Concha tenuis, subrotunda, omnium minime cava, cardinis medio sinu et amplo et pyriformi. *List. II. An. Angl. p. 174. tit. 23. tab. 4. fig. 23.*

Pectunculus latus, admodum planus, tenuis, albidus. *List. II. Conch. tab. 253. fig. 88.*

Slender Smooth Chama. *Wallis Northumb. p. 395.*

PLATE LXIV.

In referring this ambiguous Shell to the *Tellina* genus, we may incur censure, as it does not certainly possess every characteristic of a tellen, yet we conceive less impropriety in altering the genera than in retaining it as a *trigonella*.

This Shell has been admitted as the *Venus borealis* of Linnæus and from the Synonyms of Lister's figure, not without probability. We do not, however, think the Linnæan descriptions agree sufficiently with our Shell; it may be a variety of it, though we hesitate to admit it as such.

Pennant has described this Shell twice, the old Shell is *Tellina Crassa*, No. 28, and the young one *Venus borealis*, No. 52 of that author; he adds indeed "the *Tellina crassa* has the habit of *Venus borealis*, but its sides are unequal, one being more extended than the other."

Da Costa has been under similar difficulties, he gives it as a species of his genus *trigonella*, though he says in the general description, that "the hinge of this kind is of a *different structure from the TRIGONELLÆ*, for it consists of two minute, thin, plate-like, parallel teeth, aside of which is a large triangular cavity, and has no lateral teeth."

Common on several of the English shores.

PLATE LXIV.

FIG. II.

TELLINA RIVALIS.

RIVER TELLEN.

SPECIFIC CHARACTER.

Shell oblique, somewhat ovated, furrowed transversely, and of an horn colour.

TELLINA RIVALIS : testa oblique subovata transversim sulcata cornei coloris. *Maton. Linn. Trans. vol. 3.*

The English naturalist is indebted to Dr. William Maton, author of the Tour of the Western Counties, for the discovery of this new and interesting British species. The first account of it appeared in a paper presented by him to the Linnæan Society, and afterwards inserted in their Transactions; and it is to this gentleman also our thanks are due for the specimens figured in the annexed plate. We have seen it since in the Collection of William Pilkington, Esq. Whitehall; who recently found it in the river near Hungerford in Berkshire.

Dr. Maton, in his remarks on this species, says, "It does not appear to have been described, and probably was never seen by Linnaeus, nor has it been noticed by any English writer on Conchology; a figure, however, of it occurs in *Gualteri's Index, Testacrum. Conchyliorum* (Tab. 7. fig. C. C.) but has been referred to by Professor

PLATE LXIV.

Gmelin, in his edition of the *Systema Naturæ* of Linnæus for *Tellina cornea*, though it evidently differs from the latter in shape, which Linnæus considers as one of the most certain *criteria*, whereby species are to be distinguished. *Gualtieri* mentions the Shells alluded to as “*Musculus fluviatilis, striatus, subflavus pellucidus*,” which is a vague and imperfect description, and by no means sufficient to shew in what respect it differs from *T. cornea*.” The difference consists chiefly in the *T. rivalis* being of a more oblique and subovated form, and in having the hinge near one end; *T. cornea* is somewhat globose, and in particular has the hinge and beaks placed in a more central manner.

Dr. Maton has generally found *Tellina rivalis* on chalky parts of the bed of the river Avon, and in rivulets communicating with it near Salisbury; but has never seen it in any considerable abundance. He conceives, that if diligently sought after, it may be discovered in most rivers and streams which are inhabited by *Tellina cornea*.





PLATE LXV.

HELIX ZONARIA.

STRIPED SNAIL.

GENERIC CHARACTER.

Aperture of the mouth contracted, and lunulated.

SPECIFIC CHARACTER

AND

SYNONYMS.

Shell whitish, striped, convex, rather depressed. A deep round central umbilicus. Outer lip of the mouth turned backward and spread.

HELIX ZONARIA : testa umbilicata convexa depressiuscula : apertura oblongiuscula marginata. *Linn. Syst. Nat. p. 1245. No. 681.*—*Gmel. Linn. Syst. Nat. 3632. sp. 63. Gualt. 1. Conch. tab. 3. fig. L.L.L.*

Cochleola alba fasciata cantabrigiensis, umbilico parvo. Newmarket Heath Shell. *Petiv. Gaz. tab. 17. fig. 6.*

Cochlea alba leviter umbilicata pluribus fasciis circumdata, clavicula productiore. *List. H. Conch. tab. 59. fig. 56.*

Cochlea umbilicata alba virgata. Virgata. *Da Costa. Br. Conch. p. 79. tab. 4. fig. 7*

PLATE LXV.

The Shells figured in the annexed plate are the true *C. virgata* of Da Costa, but not the *Helix Zonaria* of Pennant, as that author has erroneously considered them in his *British Conchology*. It appears that the latter species came into the possession of Da Costa after the work was published, for it stands corrected in some mss. notes in his collection, though it is not noticed in his publication. Gmelin in his *Systema Natura* admits Da Costa's Shell as the Linnæan *Zonaria*; Pennant's Shell is not described by either author.

It inhabits dry sandy soils and banks, and, as Da Costa observes, is common only in some parts, as in the grass on Heddington-heath in Oxfordshire, and in Hampshire in plenty. It is also found in Cornwall, and was met with by Petiver on Newmarket-heath in Cambridgeshire.



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PLATE LXVI.

BULLA PALLIDA.

PALE, OR CYLINDRIC BULLA.

GENERIC CHARACTER.

Shell suboval. Aperture oblong, very patulous, and smooth or even. One end rather convoluted.

SPECIFIC CHARACTER.

Cylindric, white, glossy, four prominent wrinkles on the pillar lip.

BULLA PALLIDA : testa cylindrica, spira elevata acuta. *Linn. Mus. Reg. p. 588. No. 223.*

Voluta pallida testa integra oblongo ovata, spira elevata columella quadruplicata. *Linn. Syst. Nat. p. 1189. No. 405.*

Concha veneris, exigua, alba, vere cylindracea. *List. II. An. Angl. tab. 714. fig. 70.*

Porcellana integra admodum tenuis, fimbriata ; dorso pulvinato, candidissima. *Gualt. 1. Conch. tab. 15. fig. 4.*

Bulla, cylindracea, cylindric. *Penn. Br. Zool. No. 85. tab. 70. fig. 85.*

Bulla exigua cylindracea, lævis et nivea. *Da Costa Br. Conch. p. 30. sp. 16. tab. 2. fig. 7.*

PLATE LXVI.

Bulla cylindricea is esteemed a very rare species by collectors of English Shells. It is found on the western coasts of England. Da Costa received them from Cornwall and Weymouth; and Lister notes them from Barnstaple in Devonshire.

The smallest figures denote the natural size.



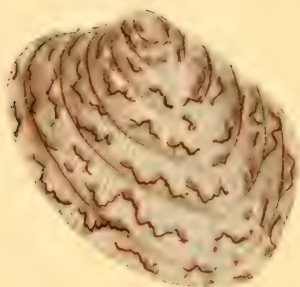
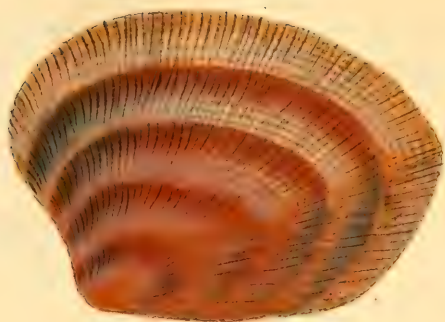


PLATE LXVII.

VENUS DECUSSATA.

RETICULATED.

GENERIC CHARACTER.

Bivalve. Hinge furnished with three teeth ; two near each other, the third divergent from the beaks.

SPECIFIC CHARACTER

AND

SYNONYMS.

Somewhat oval, wrought with transverse and longitudinal striæ, or prominent ridges, which cross or decussate each other ; outside brown, inside white, with violet spots near the hinge.

Cuneus reticulatus, longitudinaliter et transversim vel decussatim striatus, subrufus, intus ex parte violaceus. *Reticulatus*. Reticulated Purr. *Da Costa Br. Conch. p. 202. tab. 14. fig. 4. 4.*

VENUS DECUSSATA : testa ovata antice angulata decussatim striata. *Linn. Syst. Nat. p. 1133. No. 149. Mus. Reg. p. 509. No. 77?*

Concha quasi rhomboides, in medio cardine utrinque circiter tribus exiguis denticulatis donata. *List. H. An. Angl. p. 171. tit. 20. tab. 4. fig. 20.*

PLATE LXVII.

Chama fusca striis tenuissimis donata. *List. Hist. Conch. tab. 423.*
*fig. 271.**

Chama Purrs anglice dicta, et *Tellina fasciata compactilis radiata*
 intus ex parte subaurea, interdum subpurpurea.
List. Exercit. Anat. 3. p. 25: 27. tab. 3.—
Wallace Orkn. p. 42.—Chama nostras striis ca-
pillaceis. Mus. Petiv. p. 83. No. 811.

Purra fasciata et radiata. Cornwall *Purr.* *Petiv. Gaz. tab. 95.*
fig. 8.—Chama, Purrs. Dale Harw. p. 387.
No. 5.

Venus litterata, lettered. *Penn. Brit. Zool. p. 96. 53.*

The young Shells of this species vary considerably in their colours and markings, but are in general remarkable for their elegance; as they encrease in growth, these colours and markings gradually fade, and in old Shells become altogether obscure. It is found in plenty on most of the southern coasts of England and Wales.

* Gmelin makes a new species of Lister's shell in the *Systema Naturæ*, under the name *obscura*, without noticing any other author who describes the same kind "*Venus obscura* testa fusca: striis perpendicularibus tenuissimis, p. 3289. sp. 99."

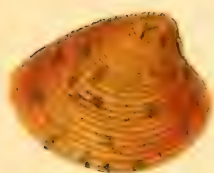
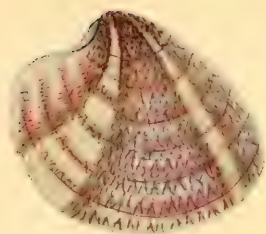


PLATE LXVIII.

VENUS STRIATULUS.

STRIATED.

GENERIC CHARACTER.

Bivalve. Hinge furnished with three teeth ; two near each other, the third divergent from the beaks.

SPECIFIC CHARACTER.

Shell somewhat heart-shaped, and marked with three or four longitudinal rays of brown.

PECTUNCULUS STRIATULUS parvus transversim striatus fusco radiatus. *Da Costa. Br. Conch. p. 191. sp. 27. tab. 12. fig. 2. 2.*

Venus Gallina testa subcordata radiata : striis transversis obtusis, cardinis dente postico minimo, margine crenulato. *Linn. Syst. Nat. p. 1130. No. 119.—Fn. Sv. 2. No. 2143 ?*

This is one of the most elegant of the British Shells. It is found on the coasts of Dorsetshire, Cornwall, and the isles of Scilly, and also on those of Wales. The general colour is pale flesh colour,

PLATE LXVIII.

radiated and figured with a chestnut brown, but in some instances they vary to an uniform brown or orange, obscurely spotted with black.

Da Costa is the only English author who notices this species.



PLATE LXIX.

PHOLAS PARVUS.

SMALL PIDDOCK.

GENERIC CHARACTER.

Animal ascidia. Shell bivalve, opening wide at each end, with several lesser valves at the hinge. The hinges folded back and connected by a cartilage.

SPECIFIC CHARACTER

AND

SYNONYMS.

Shell oval, thin, wrought with transverse wrinkles, and divided down the middle by a furrow. The half next the hinge undulated or indented. A slender and oblique curved tooth in the cavity under the beak. Size of a hazel nut.

Pholas Parvus. Little. *Pen. Br. Zool. sp.* 13.

PHOLAS PARVUS: simillima tota structura Pholade Bifronte. *Da Costa Br. Conch. p.* 247. *sp.* 67.

This shell was first described by Pennant in his Zoology; he says it very much resembles the *Pholas crispatus* but is never found larger than a hazel nut. Da Costa describes it also, but doubts whether it

PLATE LXIX.

is a distinct species or only a young shell of that kind. As both authors have however figured and described it separately, we have given it a place as a distinct, or at least doubtful species.

Pennant says he found these shells in masses of fossil wood in the shores of Abergelli in Denbighshire: the bottom of their cells were round and appeared as if nicely turned with some instrument. According to this author they will also perforate the hardest oak plank that is accidentally lodged in the water. Da Costa says they are found in great quantities on the same coasts as the other kind (*Pholas crispatus*) nitched in the rocks and stones, and adds that there is an amazing abundance at Scarborough and Whitby in Yorkshire, nitched in the Alum and other stones.





PLATE LXX.

MYTILUS BARBATUS.

BEARDED MUSCLE.

GENERIC CHARACTER.

The hinge toothless, and consists of a longitudinal furrow.

SPECIFIC CHARACTER

AND

SYNONYMS.

Short, ventricose, obtuse, ferruginous yellow. An oblique space extending from the hinge to the apex, covered with a rude epidermis and irregular filaments.

MYTILUS BARBATUS: testa læviuscula ferruginea exterius apice barbata. *Fn. Suec.* 2157. *Gmel. Linn. Syst. Nat.* p. 3353. *sp.* 10. *Chemn. Conch.* 8. *t.* 84. *f.* 749.

In trawling for marine productions in the Straits that divides Caernarvon from Anglesea (Menai) last summer, we found several specimens of the *Mytilus barbatus* of a much larger size than any hitherto

PLATE LXX.

described by authors, as the figures in the annexed plate will fully express.

Da Costa has not noticed this species, though it must have been known to him from the figures and descriptions in Pennant's Zoology, where it stands under the name of *M. Curtus*. *sp.* 76. *A.* Short. Pennant's specimen scarcely exceeds the size of the second specimen figured in our plate;—it was described from a Shell in the Portland Cabinet, that had been taken at Weymouth.

Linnæus mentions this species in the Fauna Suecica. Gmelin quotes the Works of Chemnitz for its figure, where it appears somewhat smaller than in those of Pennant. It is certainly very scarce.

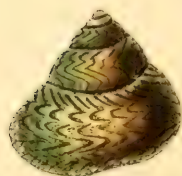


PLATE LXXI.

TURBO LINEATUS.

STREAKED.

GENERIC CHARACTER.

Animal Limax. Univalve, spiral, or of a taper form. Aperture somewhat compressed, orbicular, entire.

SPECIFIC CHARACTER.

Somewhat conic. Ash colour variegated with fine streaks and irregular marks of black; a rude tooth at the top of the pillar.

TURBO LINEATUS: trochiformis cinereus lineis aut lituris nigris insignitus, columella subdentata. *Da Costa Br.*
Conch. p. 100. sp. 56. tab. 6. fig. 7.

We believe this species is rather an uncommon, or at least local kind on the British shores, though Da Costa says it is found on the coasts of Devonshire, Cornwall, Dorsetshire, Pwllheli in Caernarvonshire, and in plenty on the coasts of Norfolk. The collection of that author contains but a single specimen, it is a worn Shell and indifferently expressed by the figure above quoted. The most characteristic Shells of this species we have seen, we found on the rocky

PLATE LXXI.

shores of Aberfraw, on the western side of Anglesea, and at Manachty the remotest part of the same island.

This Shell is large, thick, and conic or shaped like a trochus. The general colour is ashen with little variation, the lines in some are dark or almost black, in others of a pale brown, or brown tinged with red; when the external covering is worn off the Shell appears of a fine mother of pearl.

Turbo lineatus is not described by any English Author except Da Costa.



1



1



PLATE LXXII.

TURBO PERVERSUS.

REVERSED, OR OAT.

GENERIC CHARACTER.

Animal Limax. Univalve, spiral, or of a taper form. Aperture somewhat compressed, orbicular, entire.

SPECIFIC CHARACTER.

Taper, somewhat transparent. Spires turn from left to right. Mouth jagged or beset with teeth.

TURBO PERVERSUS: testa turrata pellucida, anfractibus contrariis apertura edentula. *Linn. Syst. Nat. p. 1240. No. 650.*

Cochlea testa pellucida oblonga, spiris decem sinistrorsis, apertura subrotunda. *Linn. Faun. Succ. 1. p. 372. No. 1300. 2. No. 2172.*

Buccinum pullum, opacum, ore compresso, circiter denis spiris fastigiatum. *List. II. An. Angl. p. 123. tit. 10. tab. 2. fig. 10.*

Buccinum exiguum pullum duodecim orbium. *List. H. Conch. tab. 41. fig. 39. Maj. et. min.*

Buccinum alterum pellucidum subflavum, intra senas circiter spiras mucronatum. *List. H. An. Angl. p. 124. tit. 11. tab. 2. fig. 11.*—*Phil. trans. No. 105. fig. 11.*

The small Whirl Snail, with numerous rounds, and winding from the mouth towards the right hand. *Grewe. Mus. p. 132.*—*Morton Northampt. p. 415.*—Et Buccinum heterostrophum minutum fuscum sex spirarum ore subrotundo. *Id. p. 416. tab. 13. fig. 1.*

Buccinulum Anglicum heterostrophon oblongum striis capillaceis. *Petiv. Mus. p. 65. No. 703.*

Turbo perversus. Reversed, *Penn. Br. Zool. No. 116. tab. 82. fig. 116.*

Strombiformis parvus pullus, ore compresso, anfractibus contrariis striatis. PERVERSUS, Reversed Oat. *Da Costa Br. Conch. p. 107. tab. 5. fig. 15. 15.*

This is one of the heterostrophe Shells, or such as have the mouth placed on the right side instead of the left, as is usual in most species. In general, heterostrophe Shells are mere accidental varieties only of such as turn in the usual manner*; but in the present instance, it constitutes a striking character of the species itself.

It is a matter of some difficulty to reconcile the various opinions of authors respecting the several varieties and growths of this species; Da Costa has entered into the enquiry; and the result of his remarks appear at least satisfactory to us.

* Reversed shells of the common garden snail have been found, though very rarely. One is mentioned by Dr. Latham in his Synopsis of Birds.

PLATE LXXII.

“ These smaller ones,” says Da Costa, “ are the young Shells, but always with them are found old ones of double or treble the size ; in every other respect like these, but proportionally larger and stronger in their several parts and work. The plaits or foldings near the mouth are deep and very strong ; the striae stronger and more distinct ; the border round the mouth greatly turned outwards, very broad, flat, thick, milk white, and the sinuosities, jags or teeth, within, are large, white, and very conspicuous ; some are bidentated, and most of these old ones have eleven, and some even twelve spires.

“ From these circumstances, authors run into confusion, by making the different growths different species. The accurate and judicious Lister himself has formed two species, in his tit. 10. and 11. on the difference of the number of the spires and other slight particulars. The several figures in Gualtieri are only varieties ; and the bidents of Linné, Syst. Nat. p. 1240. No. 649. and of Mr. Pennant, Brit. Zool. No. 117. tab. 81, fig. 117. is apparently no other than an old Shell, for such large and bidentated ones I have not unfrequently found nestled with these common smaller Shells.

“ Though the number of spires in a Shell is a criterion, yet it is not an infallible one, for the number of spires vary in some species, either from the growths or sexes : in such cases the young Shells have always a less number, and the males have their spires less numerous than the females. This very species is, perhaps, as strong an instance of the difference in the number of the spires as can be, for it is found from six to twelve spires, as Linné has also noted in his *Fauna Suecica*.”

Linnaeus, and Gmelin in his last *Systema Naturæ*, distinguish the

PLATE LXXII.

two species *Bidens* and *Perversus* chiefly by the number of teeth. The latter is described with three teeth, the former of course with only two. Fig. 1. 1. denotes the natural size. Fig 2. magnified.

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MARINÆ. SEA.

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MARINÆ. SEA.

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END OF VOL. II.

THE
NATURAL HISTORY
OF
BRITISH SHELLS,

INCLUDING
FIGURES AND DESCRIPTIONS
OF ALL THE
SPECIES HITHERTO DISCOVERED IN GREAT BRITAIN,

SYSTEMATICALLY ARRANGED
IN THE LINNEAN MANNER,

WITH
SCIENTIFIC AND GENERAL OBSERVATIONS ON EACH.

VOL. III.

By E. DONOVAN, F.L.S.

AUTHOR OF THE NATURAL HISTORIES OF
BRITISH BIRDS, INSECTS, &c. &c.

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1801.



THE
NATURAL HISTORY
OF
BRITISH SHELLS.

PLATE LXXIII.

MYA MARGARITIFERA.

RIVER PEARL MUSCLE.

GENERIC CHARACTER.

Animal an Ascidia. Shell bivalve, gaping at one end. The hinge for the most part furnished with a thick strong broad tooth, not inserted into the opposite valve.

SPECIFIC CHARACTER

AND

SYNONYMS.

Shell oblong, thick, and covered with a coarse black epidermis, much decorticated or worn down about the beaks. A large notched conic tooth in one valve, and two small ones in the other.

PLATE LXXIII.

MYA MARGARITIFERA: testa ovata antèrius coarctata, cardinis dente primario conico, natibus decorticatis. *Linn. Fn. Suec.* 2130.—*Gmel. Linn. Syst. Nat.* 3219. *sp.* 4.

Mya nigrescens crassa & ponderosa margaritifera. Margaritifera. *Da Costa Br. Conch. p.* 225. *sp.* 53. *tab.* 15. *fig.* 3. 3.

Musculus niger omnium crassissima et ponderosissima testa. Conchæ longæ species. *Gesn. & Aldrov. List. App. H. An. Angl. p.* 11. *tit.* 31. *tab.* 1. *fig.* 1. & *App. H. An. Angl. in Goed. p.* 15. *tit.* 31. *tab.* 1. *fig.* 1.

Musculus niger omnium longe crassissimus. Conchæ longæ species. *Gesn. & Aldr. Hist. Conch. tab.* 149. *fig.* 4.

Musculi margariferi. *Bede Hist. Ecclesiast. I.* 1. *c.* 1.

Martin's West. Isles. p. 7. &c.

Pearl Muscles. Leigh Lancashire, p. 134.

Mytilus major margariferus. *Wallis Northumb. p.* 403. *No.* 42.

Mya margaritifera. Pearl. *Penn. Br. Zool. No.* 18. *tab.* 43. *fig.* 18.

“ This shell,” says Pennant, “ is noted for producing quantities of pearl. There have been regular fisheries for the sake of this precious article in several of our rivers. Sixteen have been found in one shell. They are the disease of the fish analogous to the stone in the human body. On being squeezed, they will eject the pearl, and often cast it spontaneously in the sand of the stream.

“ The Conway was noted for them in the days of Camden. A notion also prevails that Sir Richard Wynne, of Gwydir, chamber-

lain to Catherine queen to Charles II. presented her majesty with a pearl (taken in this river) which is to this day honoured with a place in the regal crown. They are called by the Welsh Cregin Diluw, or Deluge Shells, as if left there by the flood.

“ The Irt, in Cumberland, was also productive of them. The famous circumnavigator, Sir John Hawkins, had a patent for fishing that river. He had observed pearls plentiful in the straits of Magellan, and flattered himself with being enriched by procuring them within his own island.

“ In the last century, several of great size were gotten in the rivers in the county of Tyrone and Donegal, in Ireland. One weighed thirty-six *carats*, was valued at 40*l.* but being foul lost much of its worth. Other single pearls were sold for 4*l.* 10*s.* and even for 10*l.* The last was sold a second time to lady Glenlealy, who put it into a necklace, and refused 80*l.* for it from the duchess of Ormond.”

“ Suetonius reports, that Cæsar was induced to undertake his British expedition for the sake of our pearls; and that they were so large that it was necessary to use the hand to try the weight of a single one*. I imagine Cæsar only heard this by report; and that the crystalline balls in old leases, called mineral pearl, were mistaken for them†.”

“ We believe that Cæsar was disappointed of his hope: yet we are told that he brought home a buckler made with British pearl ‡, which

* *Sutton. Vit. Jul. Cæs.* c. lxiv.

† Woodward's Method of Fossils, 29. part 2.

‡ *Plinii, lib. 9. c. 35. Tacit. Vit. Agricola.*

he dedicated to, and hung up in the temple of Venus Genetrix. A proper offering to the goddess of beauty, who sprung from the sea. I cannot omit mentioning, that notwithstanding the classics honour our pearl with their notice, yet they report them to be small and ill coloured; an imputation that in general they are still liable to. Pliny says, “ that a red small kind was found about the Thracian Bosphorus, in a shell called Mya, but does not give it any mark to ascertain the species.”

The *Mya Margaritifera* is found only in great rivers, and chiefly in those of the northern parts of Great Britain. Da Costa mentions the Tees, Alne, North and South Tyne, Tweed, Dee, Don, &c. and adds, generally inhabits the deeper parts, as gulphs, whirlpools, &c.

The fishermen in the neighbourhood of the river Conway sometimes collect those shells, and extract the pearl, but as they are now become scarce, and the price inconsiderable, the fishery affords them little encouragement.

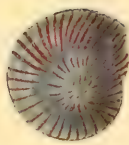
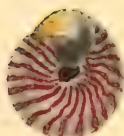
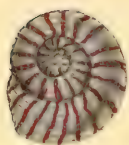
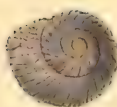


PLATE LXXIV.

TROCHUS CINERARIUS.

UMBILICAL TOP SHELL.

GENERIC CHARACTER.

Animal a slug. Shell spiral sub-conic.

SPECIFIC CHARACTER

AND

SYNONYMS.

Umbilicated or perforated at *the base*. Not very conic. Five whirls.—Colours various, generally greenish, radiated obliquely with red or brown.

TROCHUS CINERARIUS: testa oblique umbilicata, ovata, anfractibus rotundatis. *Linn. Syst. Nat. p. 1229. No. 590.*

Trochus planior umbilicatus, undatim ex fusco perbelle radiatus, UMBILICALIS *Da Costa. Br. Conch. p. 46. tab. 3. fig. 4. 4.*

Trochus planior undatim ex rubro late radiatus. *List. H. Conch. tab. 641. fig. 32.*

Umbilicated Top shell. *Dale Harwich. p. 381. No. 4.*

Trochus Umbilicaris. Umbilical. *Penn. Br. Zool. No. 106. tab. 80. fig. 106.*

A very common species on most of the British shores.



PLATE LXXV.

HELIX VORTEX.

COMMON WHIRL SHELL.

GENERIC CHARACTER.

Aperture of the mouth contracted and lunulated.

SPECIFIC CHARACTER

AND

SYNONYMS.

Shell of five wreaths, horizontal. Somewhat convex on the upper side, under side flat, and carinated, or surrounded with a sharp edge.

HELIX VORTEX: testa carinata; supra concava, aperture ovali plana.

Linn. Syst. Nat. p. 1243. No. 667.

Cochlea testa plana fusca: supra concava, anfractibus quinque, margine acuto. *Linn. Fn. Suec. I. p. 374. No. 130.*
7. 11. *No. 2172.*

Cochlea exigua, subfusca, altera parte planior, sine limbo, quinque spirarum. *List. H. An. Angl. p. 145. tit. 28.*
tab. 2. fig. 28.

Cochlea exigua quinque orbium. *List. Conch. tab. 138. fig. 43.*

Planorbis polygirata minor. *Petiv. Gaz. tab. 92. fig. 6. 7.*

Morton Northampt. p. 417.

Helix vortex. Whirl. *Penn. Br. Zool. No. 124. tab. 83. fig. 124.*

PLATE LXXV.

Cochlea exigua plana sine limbo. Planorbis. Da Costa. Br. Conch.
p. 65. sp. 36. tab. 4. fig. 12.

A very common species of aquatic snail in stagnant waters and rivers. It is flat and thin, and has not a prominent border as in *Helix Limbata* of Da Costa, or *Helix Planorbis* of Pennant.



PLATE LXXVI.

BUCCINUM RETICULATUM.

RETICULATED WRY MOUTHED WHELK.

GENERIC CHARACTER.

Animal slug. Shell spiral, gibbous, aperture oval, ending in a short canal.

SPECIFIC CHARACTER

AND

SYNONYMS.

Oblong, reticulated, or furrowed transversely and longitudinally. Mouth beset with prominent teeth.

BUCCINUM RETICULATUM: testa ovato-oblonga transversim striata, longitudinaliter rugosa, apertura dentata.
Gmel. Linn. Syst. Nat. p. 3495. sp. 111.

Buccinum recurvirostrum cancellatum, columella sinuosa, labro dentato. Reticulatum. *Da Costa. Br. Conch. p. 131. tab. 7. fig. 10.*

Buccinum brevi rostrum cancellatum, dense sinuosum, labro dentato.
List. H. Conch. tab. 966. fig. 21.

Buccinum marinum cancellatum. Small latticed Whelke. *Petiv. Gaz. tab. 75. fig. 4.*

PLATE LXXVI.

Dale Harw. p. 283. No. 7. & p. 285.

No. 3.

Smooth chequered Whelk. *Smith. Cork. p. 318.*

Very common on several of our sea coasts, especially on those of Essex, Kent, Sussex, &c. Also found in Wales and Ireland.



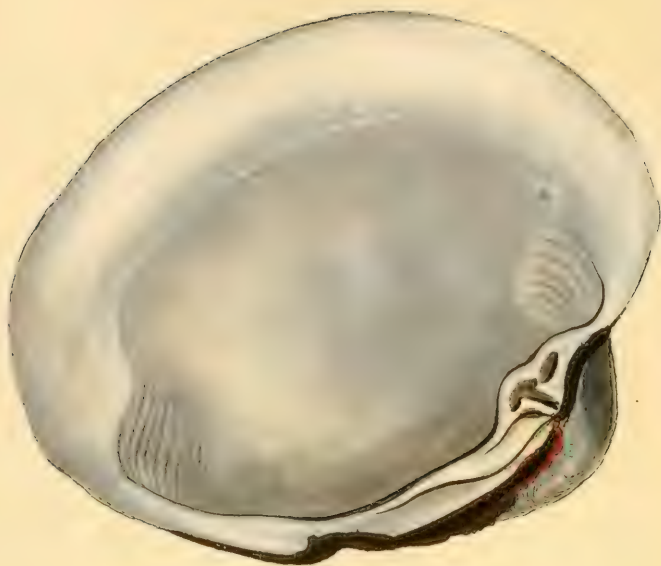


PLATE LXXVII.

VENUS ISLANDICA.

THICK VENUS.

GENERIC CHARACTER.

Bivalve. Hinge furnished with three teeth; two near each other, the third divergent from the beaks.

SPECIFIC CHARACTER

AND

SYNONYMS.

Shell strong, thick, heavy, covered with epidermis; space in which the hinge is inserted gaping. Margin acute and entire. White within.

VENUS ISLANDICA: testa transversim striata rudi, nymphis hiantibus, ano nullo. *Gmel. Linn. Syst. Nat.* 3271. *sp.* 15.

Pectunculus major crassus, albo castaneus. Crassus, *Da Costa Br. Conch. sp.* 183. *tab.* 14. *fig.* 5.

Concha é maximis, admodum Crassa, rotunda, ex nigro rufescens. *List, H. An. Angl. p.* 170. *tit.* 22. *tab.* 4. *fig.* 22.

Pectunculus maximus, subfuscus, valde gravis. *List. II. Conch. tab.* 272. *fig.* 108.

Venus mercenaria. Commercial. *Penn. Br. Zool. No.* 47. *tab.* 53. *fig.* 47.

PLATE LXXVII.

Chama inæquilatera, lævis, crassa, subalbida. Gualt. 1. Conch. tab.
85. fig. B.

Da Costa notices a material error amongst the synonyms Linnæus has given with his description of *Venus Mercenaria*. The *Venus Mercenaria* of Linnæus is the shell called North American Clam, and of which the Wampum, or indian money, is made; this is not the species found on our coast and figured by Lister, p. 173. as Linnæus imagined, but a shell altogether distinct; the English species Lister notices, is the true *Venus Islandica* of the Linnæan *Systema Naturæ*.

This error has misled Pennant, who confounds the North American kind with our species, at least as a variety having a purple tinge within it. Gmelin was aware of this mistake, for in his edition of the *Systema Naturæ*, both the plates and descriptions of Pennant and Da Costa are referred to in the synonyms of *Venus Islandica*.

This shell is perfectly white when fine, and is thickly covered with a fibrous epidermis of a black, or brownish colour. Found on several of our coasts. Da Costa mentions Northumberland, Yorkshire, Lancashire, Dorsetshire, Caernarvonshire, and other shores of Wales. Aberdeenshire, and the islands of Orkney, &c, in Scotland.



PLATE LXXVIII.

ARCA CAUDATA.

TAILED ARK SHELL.

GENERIC CHARACTER.

Animal Tethys. Shell bivalve equivalve. Teeth of the hinge numerous, inserted between each other.

SPECIFIC CHARACTER.

Oblong oval, one end rotundated, the other produced or lengthened out, angulated, and truncated at the end.

ARCA CAUDATA: testa oblongo ovali antcrius rotundata posterius elongata angulata, apice subtruncata.



Very rare, and not hitherto described as a British species. Found on the Kentish coast.



PLATE LXXIX.

BULLA RESILIENS.

ELASTIC BULLA.

GENERIC CHARACTER.

Animal Limax. Shell rather convoluted at one end, sub-oval. Aperture oblong.

Shell oval, pellucid, elastic. Spire somewhat depressed and cancellated, or grooved along the margin.

BULLA RESILIENS: ovalis, pellucida, vi resiliendi præditæ, spiræ subdepressa anfractibus canaliculatus.

This interesting species of *Bulla*, which has lately been found in Devonshire, and considered as a new discovery, was first introduced to the notice of English Conchologists by the Rev. Mr. Cordiner. He discovered them some years ago on the shores of Bamff, one of the Scottish islands, and sent them, with several others, disposed in a grotto work, as a present to the late Duchess of Portland. Since that time they have been found at Lymeington, in Dorsetshire, by Mr. Keate; and lastly, during the

PLATE LXXIX.

summer months of 1800, was taken in a moat near Portsmouth, by J. Laskey, Esq. of Crediton, who favoured us with some particulars respecting the animal inhabiting it. In a young state, he says, it has the appearance of a winged insect, and sports in its watery element with all the liveliness of a butterfly, and formed a pleasing object when kept alive in a glass of sea water. It seems to prefer little pools, or still waters within reach of the tide, to more exposed situations.

In general the specimens that have been found at Portsmouth are very small, the shell from which the upper figure is copied far exceeding the others in size. This species, though very thin and brittle, is yet so elastic as to bear much compression without injury, and in this respect differs from every other British species of *Bulla* already known. Amongst the foreign kinds are several elastic kinds; and this very species is found of a much larger size in the Mediterranean Sea.—Independent of its elasticity, the convoluted apex is a material character of this shell, considered as a British species.



PLATE LXXX.

TURBO MUSCORUM.

CYLINDRIC, OR MOSS WREATH SHELL.

GENERIC CHARACTER.

Animal Limax. Univalve, spiral or of a taper form. Aperture somewhat compressed, orbicular, entire.

SPECIFIC CHARACTER.

Cylindric, pellucid, six spires, separated by a strong furrow, obtuse at the tip. Mouth oval.

TURBO MUSCORUM: testa ovata obtusa pellucida: anfractibus senis secundis, aperture edentula. *Gmel. Linn. Syst. Nat. p. 3611. sp. 94.*

Cochlea testa subpellucida, spiris sex dextrorsis, subcylindracea obtusa, *Linn. Faun. Suec. I. p. 372. No. 1301. 2. No. 2173.*

Turbo minimus mucrone obtuso, sive vere cylindraceus. *Cylindraceus, tab. 5. fig. 16.*

Buccinum exiguum subflavum, mucrone obtuso, sive cylindraceum. *List. H. An. Angl. p. 121. tit. 6. tab. 2. fig. 6:*

Buccinulum minimum ovale. *Petiv. Gaz. tab. 35. fig. 6.*
Morton, Northampt. p. 415.

Turbo Muscerum. *Pen. Br. Zool. No. 118. tab. 82. fig. 118?*

PLATE LXXX.

Linnæus and Da Costa have described this species with six spires ; Pennant mentions only four ; and we have remarked, that those with four spires are more numerous than the others.

It is a small shell, rarely exceeding the size of the smallest figures in the annexed plate ; is very transparent, smooth and glossy, but under the magnifier exhibits many longitudinal streaks.

This shell inhabits mosses on old walls, thatches, trees, &c. It has been found by Da Costa in Middlesex and Surry ; by Petiver on the sandy banks of the Thames, at Kingston, in the latter county. Dr. Lister, in plenty at Estrope, in Lincolnshire. Morton, in great plenty in the ground near Morsley Wood, in Northamptonshire ; and received also by Da Costa, from Leeswood, in Flintshire.

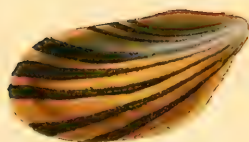


PLATE LXXXI.

MYTILUS PELLUCIDUS.

PELLUCID MUSCLE.

GENERIC CHARACTER.

The hinge toothless and consists of a longitudinal furrow.

SPECIFIC CHARACTER

AND

SYNONYMS.

Oblong, very pellucid, rayed longitudinally with purple.

MYTILUS PELLUCIDUS: oblonga pellucida longitudinaliter violaceo-radiata.

MYTILUS PELLUCIDUS. *Penn. Brit. Zool. 4. p. 112. sp. 75.*

This is one of the new species of *Mytilus* discovered by Pennant on the coast of Anglesea, where he says, it is “found sometimes in oyster-beds, and sometimes in trawling over slutchy bottoms.” We dredged up a specimen of it in the straits of Menai, but it was rather less of an oblong form than that described and figured by Pennant; and another similar to it was also found on the Flintshire shores:—both Pennant’s specimen and ours are figured in the annexed plate.

PLATE LXXXI.

We have lately received a very analogous species, if not a mere variety of it from Portsmouth; but those were evidently of foreign growth, having been gathered from the bottom of the William Tell prize ship, soon after its arrival from Malta.



PLATE LXXXII.

MYA DECLIVIS.

SLOPING MYA, OR GAPER.

GENERIC CHARACTER.

Animal an Ascidia. Shell bivalve gaping at one end. The hinge for the most part furnished with a thick, strong, and broad tooth, not inserted into the opposite valve.

SPECIFIC CHARACTER

AND

SYNONYMS.

Shell somewhat oval, posterior end obliquely angulated. Tooth of the hinge thick and scarcely prominent.

MYA DECLIVIS : testa subovali, postice oblique subangulata. Cardinis dente crasso vix prominente.

MYA DECLIVIS with a brittle, half transparent shell, with a hinge slightly prominent; less gaping than the truncata; near the open end sloping downwards. *Penn. Br. Zool. Vol. 4. p. 79. sp. 15.*

PLATE LXXXII.

Pennant informs us that this species is frequent about the Hebrides ; and that the fish is eaten by the gentry. We cannot question his authority in this respect, but must observe, it is uncommonly rare in cabinets of British Shells, and has not even been noticed, we believe, by any other Author.—Pennant has not figured it.

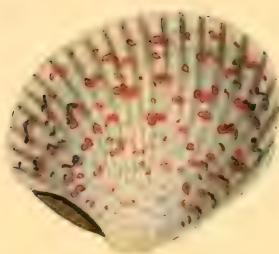


PLATE LXXXIII.

VENUS GRANULATA.

SPECKLED VENUS.

GENERIC CHARACTER.

Bivalve. Hinge furnished with three teeth; two near each other, and the third divergent from the beaks.

SPECIFIC CHARACTER

AND

SYNONYMS.

Shell rotund, sulcated longitudinally and decussated with transverse striæ; margins crenulated. Outside whitish, variegated with livid and purple spots. Inside violet,

VENUS GRANULATA: testa rotundata decussatim striata antèrius
et margine crenulato violacea. *Gmel. Linn.*
Syst. Nat. p. 3277. sp. 33.

Venus marica. *Born. Mus. Cæs. vind. test. t. 4. f. 5. 6.*

Born has figured and described this shell as *Venus Marica*, and to distinguish it from a Linnaean species of the same name some con-

PLATE LXXXIII.

chologists have denominated it *Venus Marica spuria*. It is the *Venus granulata* of Gmelin, who refers to Born's figure in the synonyms.

Gmelin describes another shell under the name of *Venus Violacea*; which nearly agrees with *V. granulata*, *V. VIOLACEA*: testa intus violacea: striis perpendicularibus squamosis, margine denticulato. *Gmel. Syst. Nat. p. 3288. sp. 94.* This shell is figured in *Lister's Conch. t. 338. f. 175.* and is destitute of those external marks and specklings we have invariably observed on specimens of *Venus granulata*.

V. granulata is very rare on our coast. The smallest shell in the annexed plate was found in Cornwall. The large specimen is probably an old shell of this species.



PLATE LXXXIV.

HELIX POMATIA.

ITALIAN OR EXOTIC SNAIL.

GENERIC CHARACTER.

Aperture of the mouth contracted and lunulated.

SPECIFIC CHARACTER

AND

SYNONYMS.

Shell globose, with five spires, and umbilicated; whitish fasciated with brown. Mouth rather roundish.

HELIX POMATIA: testa umbilicata subovata obtusa decolore, apertura subrotundo-lunata. *Gmel. Linn. Syst. Nat. p. 3627. sp. 47. Fn. Suec. 1283.*

Cochlea magna cinereo rufescens, fasciata, leviter umbilicata. POMATIA. *Da Costa. Br. Conch. p. 67. sp. 38. tab. 4. fig. 14. 14.*

Cochlea cinerea, maxima, edulis, cujus os operculo crasso velut Gypseo per hyemem clauditur. Pomatia. *Gesn. de Aquat. pp. 644. 255.*

Cochlea cinereo rufescens, fasciata, leviter umbilicata. Pomatia Gesneri. *List. II. Conch. tab. 48. fig. 46.*

PLATE LXXXIV.

Cochlea pomatia edulis Gesneri. *List. Exercit. Anat.* 1. p. 162.
tab. 1.

Cochlea alba major cum suo operculo. *Merret Pin.* p. 207.

Morton Northampt. p. 415.

Rutty Dublin. p. 379.

Helix Pomatia, Exotic. *Penn. Br. Zool. No.* 128. *tab.* 84, *fig.* 128.

Pomatia. *Argenville Conch.* I. *tab.* 32. *fig.* 1. p. 383. II. p. 338.

tab. 28. *fig.* 1. p. 81. *tab.* 9. *fig.* 4.

Helix testa imperforata globosa rufescente, fasciis obsoletis. *Mul.*

Zool. dan. prodr. 2901. *Hist. verm.* 2. p. 43. n.

243.

Cochlea testa ovata quinque spirarum, *pomatia dicta.* *Linn. Fn.*

Suec. 1. p. 369. *No.* 1293. II. *No.* 2183.

Martin berl. Mag. 2. p. 530. *tab.* 1. *fig.* 1. et. 3.

tab. 2. *fig.* 13.

Schroet. Erdconch. p. 145. n. 14. 15. *tab.* 1. *fig.*

10.

Knorr Vergn. 1. *tab.* 21. *fig.* 32.

Pennant has named this species of *Helix* with some propriety the Exotic Snail, for, though it is found at this time in vast abundance in several parts of the country, it is not an indigenous kind. By whom it was first introduced is uncertain; Pennant mentions Sir Kenelm Digby, and Da Costa speaks of Charles Howard, Esq. of the Arundel family. Its history, as related by Da Costa, is so very interesting, that we shall give it in the words of its author:—

“ It is the largest species of land snail in England, and is found in hedges and woods. It closes its shell carefully against winter, with a

PLATE LXXXIV.

white thick cover or operculum, dull and like plaister, and in the closed state it remains till the beginning of April, or warm weather, at which time it loosens the border of the cover, and the animal creeps out of the shell for its necessary occasions. Dr. Lister informs us he kept one in his bosom about the beginning of March, when the animal, feeling the warmth, in a few hours disengaged its cover, and crept out.

“ The animal being large, fleshy, and not of an unpleasant taste, has been used for food in ancient times: it was a favourite dish with the Romans, who had their cochlearia, or snail stews, wherein they bred and fattened them. Pliny tells us, that the first inventor of this luxury was a Fulvius Harpinus, a little before the civil wars between Cæsar and Pompey. Varro has handed down to us a description of the stews, and manner of making them: He says, open places were chose, surrounded by water, that the snails might not abandon them, and care was taken that the places were not much exposed to the sun, or to the dews. The artificial stews were generally made under rocks or eminences, whose bottoms were watered by lakes or rivers; and if a natural dew or moisture was not found, they formed an artificial one, by bringing a pipe to it bored full of holes, like a watering pot, by which the place was continually sprinkled or moistened. The snails required little attention or food, for as they crawled they found it on the floor or area, and on the walls or sides, if not hindered by the surrounding water. They were fed with bran and sodden lees of wines, or like substances, and a few laurel leaves were thrown on it.

“ Pliny tells us there were many sorts, as the Whitish from Umbria, the large sort from Dalmatia, and the African, &c. This par-

PLATE LXXXIV.

ticular kind seems to be that he mentions, 1. 8. c. 39. They propagate very much, and their spawn is very minute.

“ Varro is scarcely to be credited, when he says, some would grow so large, that their shells held ten quarts.

“ They were also fed and fattened in large pots or pans, stuck full of holes to let in the air, and lined with bran and sodden lees, or vegetables.

“ They are yet used as food in several parts of Europe, more especially during Lent, and are preserved in stews or *escargotoires*, now a large place boarded in, and the floor covered with herbs, wherein they nestle and feed.

“ In Italy, in many places, they are sold in the markets, and are called *Bavoli*, *Martinacci* and *Gallinelle*; in many provinces of France, as Narbonne, Franche Comté, &c. and even in Paris. They boil them, says Lister, in river water, and seasoning them with salt, pepper, and oil, make a hearty repast.

“ This is not indigenous, or originally a native of these kingdoms, but a naturalized species, that has throve so well, as now to be found in very great quantities. It was first imported to us from Italy about the middle of last century, by a *scavoir vivre*, or epicure, as an article of food. Mr. Aubrey informs us, it was a Charles Howard, Esq. of the Arundel family, who, on that account, scattered and dispersed those snails all over the downs, and in the woods, &c. at Albury, an ancient seat of that noble family, near Ashted, Boxhill, Dorking, and Ebbisham, or Epsom, in Surrey, where they have thriven so much that all that part of the county, even to the confines of Sussex,

PLATE LXXXIV.

abounds with them ; insomuch that they are a nuisance, and far surpass in number the common, or any other species of English snails.

The Epicures, or *scavoir vivre*, of those days, followed this luxurious folly, and the snails were scattered or dispersed throughout the kingdom, but not with equal success ; neither have records transmitted to posterity the fame of those worthies equal to the Roman Fulvius Harpinus, except of two, the one Sir Kenelm Digby, who dispersed them about Gothurst the seat of that family (now of the Wrights) near Newport Pagnel, in Buckinghamshire, where probably they did not thrive much, as they were not frequent thereabout : the other worthy was a lord Hatton, recorded by Mr. Morton, who scattered them in the coppices at his seat at Kirby, in Northamptonshire, where they did not succeed.

“ Dr. Lister found them about Puckeridge and *Ware*, in Hertfordshire ; and observes, they are abundant in the Southern parts, but are not found in the northern parts of this island.

“ In Surry, as before mentioned, they abound ; in several other counties they are not uncommon, as in Oxfordshire, especially about Woodstock and Bladen ; in Gloucestershire, in Chedworth parish, and about Frog Mill, in Dorsetshire, &c. but I have never heard that they are yet met with in any of the northern counties.”





PLATE LXXXV.

MYA ARENARIA.

SAND GAPER.

GENERIC CHARACTER.

Animal an Ascidia. Shell bivalve, gaping at one end. The hinge for the most part furnished with a thick, strong, broad tooth, not inserted in the opposite valve.

SPECIFIC CHARACTER

AND

SYNONYMS.

Shell rather ovated, one end rounded, the other narrow and gaping. Hinge, in one valve a hollow cavity, near which a broad, erect, rounded tooth of the opposite valve is received.

MYA ARENARIA: testa ovata posterius rotundata, cardinis dente antrosum porrecto rotundato denticuloque laterali.
Lin. Faun. Suec. 2127.—*Gmel. Linn. Syst. p.*
3218. 303. *sp.* 2.

Mya Arenaria. Sand. *Penn. Br. Zool. p.* 79. *T.* 42. 16.

Chamæ media ovata fusca. Arenaria. Da Costa. Br. Conch. p. 232.
sp. 56.

MYA ARENARIA. *Bast. opusc. subs. 2. p.* 69. *t.* 7. *fig.* 1-3.

PLATE LXXXV.

This species is similar in its external appearance to the *Mactra Lutraria*; yet it may be immediately distinguished from that shell by the singular structure of the hinge. The large, erect, plate-like tooth common to the *Mya* genus, is particularly characteristic in this species.

Da Costa received it from the Isle of Wight, near Newport, and from Bigbury-Bay, near Faversham; but observes, it is not a common shell.



PLATE LXXXVI.

MUREX DECOLLATUS.

SHORTENED MUREX, OR ROCK SHELL.

GENERIC CHARACTER.

Spiral, rough, the aperture ending in a strait, and somewhat produced gutter or canaliculation.

SPECIFIC CHARACTER.

MUREX DECOLLATUS: testa ventricosa lævi, patulo-subcaudata, spira in capitulum desinente.

Somewhat ventricose, smooth, mouth produced. Spire terminated in a capitulum or knob.

MUREX DECOLLATUS. *Penn. Br. Zool. T. 4. p. 125. sp. 102.*

Pennant offers his *Murex Decollatus* as a species with doubts. It has certainly the appearance of a shell much mutilated, or of extraordinary growth; but as all the specimens we have examined exhibit the same appearance, we have ventured to assign it a new character, and rank it as a distinct species.

It is a rare shell on the British shores, said to have been found on those of Cornwall and Devonshire.







PLATE LXXXVII.

HELIX VIVIPARA.

VIVIPAROUS SNAIL.

GENERIC CHARACTER.

Aperture of the mouth contracted and lunulated.

SPECIFIC CHARACTER

AND

SYNONYMS.

Shell suboval, obtuse, spires ventricose or swelled, umbilicated. Olive, girdled with three brown lines.

HELIX VIVIPARA: testa imperforata subovata obtusa cornea: cingulis fuscatis, apertura suborbiculari *Fn. Su.* 2185.—*Gmel. Linn. Syst. Nat. p.* 3646. *sp.* 105.

Cochlea testa oblongiuscula obtusa anfractibus teretibus, lineis tribus lividis. *Fn. Suec. I. p.* 375. *No.* 1312.

Cochlea maxima fusca sive nigricans, fasciata. *List. II. An. Angl p.* 133. *tit.* 18. *tab.* 2. *fig.* 18.

Cochlea fasciata ore ad amussim rotundo. *Phil. Trans. No.* 105. *fig.* 17.—Cochlea maxima viridescens fasciata vivipara. *List. Exercit. Anat.* 2. *p.* 17. *tab.* 2.

C. vivipara fasciata fluviatilis. *List. II. Conch. tab.* 126. *fig.* 26.—C. vivipara altera nostras testa tenuiori fluvii Cham. *Ib. Mant. tab.* 1055. *fig.* C.

PLATE LXXXVII.

Helix vivipara, viviparous. *Penn. Br. Zool. No. 132. tab. 84.*
fig. 132.

Cochlea fusco viridescens trifasciata. Vivipara. *Da Costa. Br.*
Conch. p. 81. sp. 44.

This kind is found in abundance in all rivers and stagnant waters. The river kind seems to vary in some respects from the other; the shells are more opake, and the colours are brighter than in those which inhabit the stagnant water.

The animal has a head not unlike that of a Bull, from which circumstance the Swedes, according to Linnæus, call it the Bull-head, and some French authors, *limacon à tête de bœuf*, for the same reason. It feeds on Duck Weed.





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PLATE LXXXVIII.

BULLA HYDATIS.

PINNACE DIPPER, OR BUBBLE SHELL.

GENERIC CHARACTER.

Animal Limax. Shell rather convoluted at one end, sub-oval, Aperture oblong.

SPECIFIC CHARACTER

AND

SYNONYMS.

Oblong-oval, fragile, pellucid, finely striated longitudinally, base deeply umbilicated.

BULLA HYDATIS: testa rotundata pellucida longitudinaliter substriata: vertice umbilicato. *Linn. Syst. Nat. p. 1183. No. 377.*—*Gmel. Linn. Syst. Nat. 3424. sp. 9.*

Nux Marina umbilicata, minutissime per longitudinem striata, subrotunda, ore admodum patulo, tenius, fragilis candida. *Gualt. 1. Conch. tab. 13. fig. D. D. Chemn. 9. t. 118. f. 1019.*

Bulles d'eau blanches, papyracées. Tonnes à bouche entiere. *D'Avila Cab. p. 207. No. 389.*

Bulla Ovalis, fragilis et pellucida. Naviacula. *Da Costa Br. Conch. p. 28. sp. 15.—Tab. 1. fig. 10.*

PLATE LXXXVIII.

Da Costa observes, that all the shells he had seen of this species were fished up at, or near, Weymouth in Dorsetshire; and concludes, that it is rare in our seas, having never heard of it on any other British coast. We believe with Da Costa, it is local; though it probably inhabits other parts of our coasts.

We have been lately favoured with several shells of the *Bulla* genus from Portsmouth, which some Conchologists have thought a new species, and named *Citrina*; they do not, certainly, differ specifically from the shell in Da Costa's collection, which he calls *Bulla Naviacula*, (*Hydatis* of Linnaeus) as will appear evident from the specimens figured in the annexed plate.

Fig. 1.—*Bulla Naviacula* (*Hydatis* Linn.)——Fig. 2, a specimen from Portsmouth of a paler colour than Da Costa's shell.——Fig. 3, 4. old shells found on the mud and clay of the shore.



PLATE LXXXIX.

MYA OVALIS.

OVAL GAPER.

GENERIC CHARACTER.

Animal ascidia. Shell bivalve, gaping at one end. The hinge for the most part furnished with a thick, strong, broad tooth, not inserted in the opposite valve.

SPECIFIC CHARACTER

AND

SYNONYMS.

Shell rather an oblong oval, with a large longitudinal crenulated tooth in one valve, and two in the other.

MYA OVALIS: testa oblongo-ovali cardinis dente primario crenulato longitudinali: alterius duplicato.

Musculus angustior, ex flavo viri descens, validus, umbonibus acutis, valvarum cardinibus velut pinnis donatis, sinuosis.

List. Angl. t. 2. f. 30.

Long thick horse Muscle. *Petiv. Gaz. tab. 93. fig. 9*

Mya pictorum. Penn. Br. Zool. 43. fig. 17.

PLATE LXXXIX.

Mya minor ex flavo viridescens. PICTORUM *Da Costa. Br. Conch.*
p. 228. tab. 14. fig. 4. 4.

Pennant and Da Costa have erroneously given this as the *Mya pictorum* of Linnæus, from which it differs in several respects. The *Mya pictorum* is much more ovate, or egg-shaped, as Linnæus expresses it, and thinner than the present shell, which is of a lengthened, or rather oblong form, and remarkably thick, though semi-transparent. In adopting a new specific name that of *oblonga* would have been preferred, had it not been pre-engaged by *Gmelin* to a totally distinct species.

This species is common in rivers and fresh waters, and sometimes produce little pearls.





PLATE XC.

TURBO LACTEUS.

SMALL TURBO.

GENERIC CHARACTER,

Animal Limax. Shell univalve, spiral, or of a taper form. Aperture somewhat compressed, orbicular, entire,

SPECIFIC CHARACTER

AND

SYNONYMS.

Shell taper, with many longitudinal, elevated striæ, or ridges.

TURBO LACTEUS: testa turrita: striis longitudinalibus elevatis confertis. *Linn. Syst. Nat. p. 1238. No. 634.*

Turbo parvus interdum lacteus, interdum violaceus aut fuscus, costis longitudinalibus confertus. Parvus. *Da Costa. Br. Conch. p. 104. sp. 61.*

Found on the coasts of Cornwall, Devonshire, and Guernsey.—
This is a minute and scarce British species; the smallest figures in the annexed plate denote the natural size.

PLATE XC.

Some specimens are pure white, others beautifully tinged with purple; and the most perfect white and brown. The mouth is round, surrounded on the outside by a thick prominent border. It has no umbilicus. The shell consists of five spires, gradually tapering to an acute point; and separated by a depression. The longitudinal ribs are thick and prominent.





PLATE XCI.

MUREX COSTATUS

RIBBED MUREX.

GENERIC CHARACTER.

Spiral, rough. The aperture ending in a strait and somewhat produced gutter or canaliculation.

SPECIFIC CHARACTER

AND

SYNONYMS.

Oblong, spires six, tapering, with eight longitudinal ribs.

Buccinum canaliculatum parvum, anfractibus costis longitudinalibus distinctis. Costatum. *Du Costa. Tab. 8. fig. 4.*

MUREX COSTATUS. Ribbed. *Penn. Br. Zool. No. 100. tab. 79. fig. 1. 4.*

This elegant little shell was first discovered by Mr. Pennant, on the coast of Anglesea, and described under the name of *Murex Costatus*. In retaining this name it will be proper to observe, that *Gmelin*, in his edition of the *Systema Naturæ*, has another shell

PLATE XCI.

under the same name, a ribbed and cancellated species found in a fossil state, in *Champagne*, altogether distinct from this shell.

Da Costa received this species from the coasts of Cornwall and Devonshire. Pennant says it inhabits Norway. The smallest figures denote the natural size,



PLATE XCII.

MYA TRUNCTATA.

TRUNCATED GAPER.

GENERIC CHARACTER.

Animal an ascidia. Shell bivalve, gaping at one end. The hinge for the most part furnished with a thick, strong, broad tooth, not inserted into the opposite valve.

SPECIFIC CHARACTER

AND

SYNONYMS.

Shell roundish, one end truncatated or abrupt. Tooth projecting and obtuse.

MYA TRUNCTATA: testa ovata posterius truncata, cardinis dente antrorsum porrecto obtussissimo. *Linn. à. Gmel. Syst. Nat. T. I. fig. 6. p. 3217.*

Concha lævis, altera tantum parte clusilis, apophysi admodum prominente lataque prædita. *List. H. An. Angl. p. 191. tit. 36. tab. 5. fig. 36.*

PLATE XCII.

Mya truncata, abrupt. *Penn. Br. Zool.* 4. 14. *tab.* 41. *fig.* 14.

Chama subrotunda fusca rugosa, exaltera parte truncata. TRUNC-
TATA. *Da Costa. Br. Conch.* p. 233. *sp.* 57.

Common on many of the British shores.





PLATE XCIII.

HELIX TENTACULATA.

KERNEL, OR OLIVE WATER SNAIL.

GENERIC CHARACTER.

Aperture of the mouth contracted and lunulated.

SPECIFIC CHARACTER

AND

SYNONYMS.

Shell without umbilicus, sub-conic, five spires. Aperture rather oval.

HELIX TENTACULATA: testa imperforata ovata obtusa impura, aperture subovata. *Linn. Syst. Nat. p. 1249. n. 707.*

Cochlea parva pellucida, operculo testaceo cochleatoque clausa. *List. H. Conch. tab. 132. fig. 32.*

Cochleola oblonga fluviatilis, common small river snail. *Petiv. Gaz. tab. 18. fig. 8.*—Small fresh water turbo with five wreaths. *Wallis Northumb. p. 370.*

Turbo imperforatus parvus subrufus, lævis, quinque spirarum. Nucleus. *Da Costa. Br. Conch. p. 91. sp. 50.*

PLATE XCIII.

Helix tentaculata. *Penn. Brit. Zool.* 4. No. 140, tab. 86. fig.
140.

Inhabits most rivers and stagnant waters.





x



PLATE XCIV.

STROMBUS COSTATUS.

RIBBED STROMBUS.

GENERIC CHARACTER.

Animal a slug. Shell univalve, spiral. Aperture dilated, lip expanding, produced into a groove.

SPECIFIC CHARACTER

AND

SYNONYMS.

Shell small, brown, taper, spires swelled, and wrought with prominent longitudinal ribs.

Strombiformis parvus fuscis, anfractibus costis elatis longitudinalibus insignitis.

COSTATUS. *Da Costa. Br. Conch. p. 118. sp. 71.*

Da Costa, who is the only author that describes this curious shell, says it is found on the coasts of Cornwall.



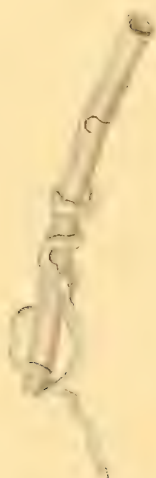


PLATE XCV.

SERPULA VERMICULARIS.

COMMON SERPULA.

GENERIC CHARACTER.

Animal a terebella, or whimble worm. Shell tubular, adheres to other bodies, as shells, stones, &c.

SPECIFIC CHARACTER

AND

SYNONYMS.

Shell round, cylindrical, or scarcely tapering, curved and wrinkled.

SERPULA VERMICULARIS: testa tereti subulata curvata rugosa.

Lin. Syst. Nat. a Gmel. T. I. fig. 4. p. 3743.

—Dentalium testa cylindracea inæquali flexuosa contorta. *Lin. Fn. Sv. I. p. 380. No. 1328.*

Tubuli in quibus vermes. Worm Shells. *Merret, Pin. p. 194.*

SERPULA VERMICULARIS. Worm. *Penn. Brit. Zool. No. 157.*

tab. 91. fig. 159.

Serpulæ vermicularis, common. *Da Costa Br. Conch. p. 18. sp. 9.*

—*Tab. 2. fig. 5.*

Those shells are extremely frequent on all the British coasts, either in groupes attached to stones, shells and marine exuvixæ, or in single

PLATE XCV.

detached shells, assuming sometimes the appearance of a turbinated univalve.

The colour is in general white: an elegant variety, deeply tinged with red, as represented in the annexed plate, was dredged up at Brighton, and communicated by Mr. P. Munn, of Bond-street.





PLATE XCVI.

TELLINA CORNEA.

HORNY TELLEN.

GENERIC CHARACTER.

The hinge usually furnished with three teeth; shell generally sloping on one side.

SPECIFIC CHARACTER

AND

SYNONYMS.

Subglobose, glabrous, horn colour, with a transverse furrow.

TELLINA CORNEA: concha testa subglobosa glabra cornei coloris: sulco transversali. *Lin.*

Musculus exiguus, pisi magnitudine, rotundus subflavus, ipsis valvarum oris albidis. *List. H. An. Angl. p. 150. tit. 31. tab. 2. fig. 31.*

Pectunculus fluviatilis nostras nuciformis. *Petiv. Mus. p. 86. No. 831.*

Musculus fluviatilis, æquilaterus, lævis rotundus, pisiformis, ex rubro flavescens, ipsis valvarum oris albidis. *Gualt. I. Conch. tab. 7. fig. C.*

PLATE XCVI.

C. Parvum globosum viride-fuscum. Nux. *Da Costa Br. Conch.*
173.

Tellina Cornea. Horny. *Penn. Br. Zool. No. 36. tab. 49. fig. 39.*

Da Costa observes, that Linnæus has placed this shell very improperly in the *Tellina* genus, as it does not agree with his own definition of that genus, and remarks that its habit, shape, convexity, &c. brings it nearer to the *Cardium* than any other kind.—It still remains a *Tellina* in the last edition of the *Systema Naturæ* by Gmelin, and we are not disposed in the present instance to deviate from that authority.

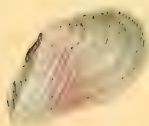
This, and the *Tellina rivalis* described by Dr. Maton, in the Linnæan Transactions, are very analogous, though evidently two distinct species, as we have before noticed in our description of the latter, Plate 62.—*Tellina Cornea*, according to Geoffroy, is a viviparous animal, and is found in great plenty in most rivers and stagnant waters.



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PLATE XCVII.

TELLINA FABULA.

SEMI-STRIATED TELLEN.

GENERIC CHARACTER.

The hinge usually furnished with three teeth. Shell generally sloping on one side.

SPECIFIC CHARACTER

AND

SYNONYMS.

Shell ovate, compressed, inflected, or rather produced at one end. One valve smooth, the other marked with numerous oblique reflected striae.

TELLINA FABULA: testa ovata compressa inflexa antèrius subrostrata: valva altera lævi, altera oblique substriata: striis reflexis.—*Gronov. Zooph. tab. 13. fig. 9.*
Gmel. Linn. Syst. Nat. T. I. p. 6. p. 3239.
sp. 61.

We discovered this very unusual species on the sands opposite to Caldy Island, about two miles beyond Tenby, Pembrokeshire. It is

PLATE XCVII.

noticed by Gronovius and Gmelin as a Norwegian and Mediterranean shell, and is said to have been found on the coast of Dorsetshire, by the late Dr. Pultney; but has never been before described as a British species.

The smallest figures represent the natural size.



PLATE XCVIII.

TELLINA FAUSTA.

GENERIC CHARACTER.

The hinge usually furnished with three teeth. Shell generally sloping on one side.

SPECIFIC CHARACTER.

Somewhat triangular with many obsolete minute transverse striae.

TELLINA FAUSTA: testa subtriangulari, striis transversis minutissimis obsoletis.

Tellina fausta. *Soland. Ms.—List. Conch. t. 388. f. 235.*



An extremely scarce British species, and not mentioned by either Penant, or Da Costa.

This shell is generally of a pale cream colour on the outside, and beautifully tinged with yellow within.

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PLATE XCIX.

HELIX CONTORTA.

THICK RIVER CHEESE SHELL.

GENERIC CHARACTER.

Aperture of the mouth contracted and lunulated.

SPECIFIC CHARACTER

AND

SYNONYMS.

Shell thick, umbilicated, flattish. Aperture narrow and crescent-shaped.

HELIX CONTORTA: testa subumbilicata plana utrinque æquali: apertura lineari arcuata. *Gmel. Linn. Syst. Nat. p. 3624.*

Planorbis minima crassa Tiney many-circled, thick, river cheese shell. *Petiv. Gaz. tab. 92. fig. 8.*

Planorbis minima crassa, utrinque umbilicata, anfractibus subdepressis. Crassa. *Da Costa Br. Conch. p. 66. sp. 37. Tab. 4. fig. 11.*

PLATE XCIX.

This aquatic snail is rather scarce ; it has been lately found in the Thames, near Greenwich. Petiver says his were found in the rivulets about Peterborough House, Westminster.

Da Costa mistook this for the *Helix complanata* of Linnæus ; it is evidently the *Helix contorta* of that author, who very minutely describes it in the *Fauna Succica*.





PLATE C.

SERPULA GRANULATA.

GENERIC CHARACTER.

Animal a tercbella, or whimble worm. Shell tubular, adheres to other bodies, as shells, stones, &c.

SPECIFIC CHARACTER

AND

SYNONYMS.

Shell roundish, spiral, glomerate: three elevated ridges on the upper side.

SERPULA GRANULATA: testa tereti spirali glomerata; latere superiore sulcis tribus elevatis. *Gmel. Syst. T. I. p. 6. p. 3741. sp. 9.*

This singular species has not been before noticed as an English Shell. We found it intermixed with *Lepas Intertexta* on the shell of the common Lobster. Linnæus says it is found in the North Seas in large masses, adhering to stones, and shells.





PLATE CI.

MYA DEPRESSA.

DEPRESSED MYA.

GENERIC CHARACTER.

Animal an ascidia. Shell bivalve, gaping at one end. The hinge for the most part furnished with a thick, strong, and broad tooth, not inserted into the opposite valve.

SPECIFIC CHARACTER.

Somewhat ovate, anterior part rather wedge-shaped and sloping : a slight depression across the middle ; posterior part roundish, gaping. Teeth at the hinge crenulated.

MYA DEPRESSA : testa subovata, antice sub-cuneiformi declivi, medio depressa, postice rotundata hiantes, cardinis dente crenulato.

After comparing the numerous kinds of fresh water Myæ found in different parts of the kingdom, the conchologist will perhaps be surprised at the small number we shall venture to admit as distinct species. The varieties of those Shells seem endless, and it may be

PLATE CI.

doubted whether they are not in general indebted to age, accident, or the peculiar qualities of the waters they inhabit, for those variations in general appearance that have been too frequently mistaken for characteristic differences of species.

As the *Mya* will fall under consideration more fully hereafter, we shall for the present confine our remarks to the shell before us, and its very analogous kind, the *Mya ovata* of Dr. Solander.

This has been considered by some as a mere variety of *ovata*, and we confess our opinion is still wavering in assigning it a name and character as a new species. The *Mya ovata* has been lately found in the river Frome in Somersetshire, and likewise in the New River near London. What are usually deemed its varieties are numerous, but none of them can, we believe, be considered as distinct species, except the present, which is certainly the most remote of any, if it is really a variety of that species. The *Mya ovata*, in all its gradations, seems somewhat more ventricose and ovate in its contour, than this Shell; and though the variations of the latter are considerable, we have generally observed a slight depression, across the middle, which causes the narrowest end to be rather flattened throughout, and it is also rather more cuneiform or wedge-shaped at this end than *Mya ovata*: to this we might perhaps add, with some propriety, that the gaping beyond the hinge at the broadest end, is wider than in *Mya ovata*.

Whether this difference is actually sufficient to form a distinct specific character, and whether it is constant in other shells of this kind, still remains in some degree of uncertainty. Both this and the *Mya ovata* inhabit the same waters, for we have seen several specimens from the

PLATE CI.

river Frome, where it is known the *Mya ovata* is also found; and as to colour, it is no criterion: both kinds are greenish, radiated with yellow, and are more or less vivid in different shells: they are seldom higher in colour than the specimen we have figured; some are more of an olive colour, and others are deeply tinged with brown.

PLATE CII.

TURBO FONTINALIS.

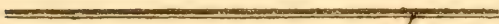
GENERIC CHARACTER.

Animal Limax. Univalve, spiral, or of a taper form. Aperture somewhat compressed, orbicular, entire.

SPECIFIC CHARACTER.

Shell umbilicated, subconic, wreaths ventricose, smooth.

TURBO FONTINALIS: testa umbilicata subconica anfractibus ventricosis lævibus.



Not described by Pennant or Da Costa. Lives in clear fresh waters.



PLATE CIII.

TELLINA RIGIDA.

FLAT AND RIDGED TELLEN.

GENERIC CHARACTER.

The hinge usually furnished with three teeth. Shell generally sloping on one side.

SPECIFIC CHARACTER

AND

SYNONYMS.

Somewhat depressed, subrotund, thick, with numerous transverse thread-like ridges, and a still deeper longitudinal depression near the posterior end.

TELLINA RIGIDA : testa subdepressa subrotunda crassa transversim confertissime striata, postice longitudinaliter magis depressa.

Tellina crassa. *Penn. Br. Zool. p. 87. sp. 28 ?*

Pectunculus depressior subrotundus, dense et transversim strigatus.

Depressior. *Da Costa Br. Conch. p. 194. sp. 30. Tab. 13. fig. 4.*

Da Costa, who appears to be the only author that describes this shell, says he received it from the coast of Cornwall.

PLATE CIII.

This is a thick and heavy shell, though rather transparent ; the sides nearly similar, and the beaks almost central. The colour is generally white, with a tinge of yellow on the outside, and some specimens are beautifully radiated with pale pink : the inside is remarkably glossy and finely tinged with yellow, red and orange.





PLATE CIV.

BUCCINUM UNDATUM.

WAVED, OR COMMON WHELKE.

GENERIC CHARACTER.

Aperture oval, ending in a short canal.

SPECIFIC CHARACTER

AND

SYNONYMS.

Shell oblong, coarse, transversely striated, with many curved angles.

BUCCINUM UNDATUM : testa oblonga rudi transversim striata ; anfractibus curvato-multangulis. *Gmel. Linn. Syst. Nat. T. 3. p. 3492. sp. 93.—Faun. Succ. 2263.*

Buccinum crassum rufescens, striatum et undatum. *List. II. An. Angl. p. 156. tit. 2. tab. 3. fig. 2.—Et Bucc. tenue, læve, striatum et undatum. Id. p. 157. tit. 3. tab. 3. fig. 3.—Bucc. brevi rostrum tenuiter striatum, pluribus undatis sinubus distinctum. List. H. Conch. tab. 962. fig. 14.—Et Bucc. brevi rostrum magnum, tenue, leviter striatum. Id. tab. 962. fig. 15. 15. a—Id. Exerc. Anat. Alt. p. 68.*

PLATE CIV.

Rough, and our most common whelke. *Dale Harw. p. 382*

No. 3. 4.

Buccinum undatum, waved, *Penn. Brit. Zool. No. 90. pl. 73.*

Buccinum striatum, striated. *Penn. Br. Zool. No. 91. pl. 74.*

Buccinum canaliculatum medium vulgare rufescens striatum, pluribus costis undatis distinctum. Vulgare *Da Costa. Br. Conch. p. 122: sp. 73. tab. 6. fig. 6. 6.*

This is the common Whelke of English conchologists, and is sometimes brought to the markets as an article of food. The brown ones are this common sort, for as Linnaeus observes, those that are brown fasciated with white or blue are scarce; the former of those varieties is figured in the annexed plate.

Lister, Pennant and other authors have considered the striated variety of this Shell as a distinct species; it is certainly destitute of those prominent ribs or knobs which is so conspicuous in this Shell in general, but the transitions from the striated kind to those with knobs is so gradual and easy to be traced that we must coincide with Linnaeus and Da Costa who admit them barely as varieties.

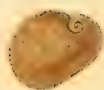


PLATE CV.

HELIX LÆVIGATA.

SMOOTH SNAIL.

GENERIC CHARACTER.

Aperture of the mouth contracted and lunulated.

SPECIFIC CHARACTER

AND

SYNONYMS.

Imperforate, pellucid, roundish, of two wreaths: the first very large, the second small, obtuse, and placed laterally.

HELIX LÆVIGATA: testa imperforata obovata obtusissima pellucida lævissima. *Gmel. Linn. Syst. Nat. T. I. p. 6. p. 3663. sp. 148.*

Helix lævigata. Smoothed. *Penn. Br. Zool. T. 4. t. 86. f. 139. Testa M. rar. f. 17. Chemn. f. 1590. 9.*

A rare Shell, found on the Kentish coast, and on the beach at Studland, Dorsetshire. Communicated by the Rev. T. Rackett.

Pennant considers this as a fresh water Shell, saying it inhabits ponds. Gmelin is silent respecting its habitation.





PLATE CVI.

MACTRA STULTORUM.

RAYED MACTRA.

GENERIC CHARACTER.

Animal a Tethys. Bivalve, sides unequal. Middle tooth complicated, with a little groove on each side ; lateral teeth remote.

SPECIFIC CHARACTER

AND

SYNONYMS.

Shell semi-transparent, smooth, with faint radiations ; within purplish.

MACTRA STULTORUM: testa subdiaphana lævi obsolete radiata, intus purpurascente, vulva gibba. *Gmel. Syst. Nat. T. 1. p. 6. p. 3258. sp. 11.*

Pectunculus triquetrus ex flavo radiatus. *List. H. Conch. tab. 251. fig. 85.*

Mactra stultorum, Simpleton. *Penn. Br. Zool. No. 42. tab. 52. fig. 42.*

Trigonella tenuis admodum concava ferrugineo-cinerea radiata. Radiata. *Da Costa Br. Conch. p. 196. sp. 32.—Tab. 12. fig. 3. 3.*

PLATE CVI.

This Shell, we observed in plenty, on the sandy shores of South Wales, and particularly on those of Pembrokeshire. It is also found on the western coasts ; at Highlake in Cheshire, near Liverpool ; at the mouth of the river Mersey ; and on the coast of Aberdeenshire and other shores of Scotland.

The general colour of the outside is a kind of milky white, delicately radiated with brown ; within, the young shells are tinged with reddish brown, the old ones with violet.

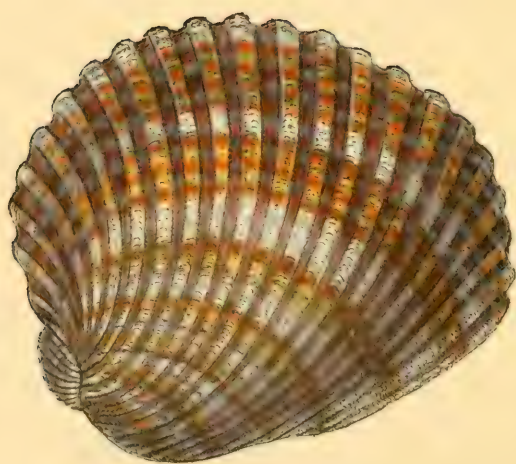
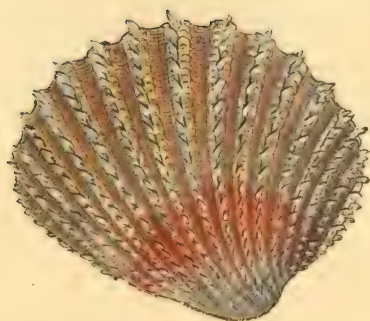


PLATE CVII.

FIG. I.

CARDIUM ECHINATUM.

THORNY COCKLE.

GENERIC CHARACTER.

Two teeth near the beak ; and another remote one, on each side of the Shell.

SPECIFIC CHARACTER

AND

SYNONYMS.

Shell somewhat heart shaped, ribs prominent with a carinated ridge beset with spines along the middle.

CARDIUM ECHINATUM : testa subcordata sulcata : costis carinatis aculeatis. *Linn. Gmel. Syst. Nat. T. I. p. 6. p. 3247. sp. 8.*

Pectunculus orbicularis fuscus, striis mediis muricatis. *List. II. Conch. tab. 324. fig. 161.*

Cardium Echinatum. *Penn. Brit. Zool. No. 38.*

Cardium orbiculare, costis circiter viginti echinatis, spinis hamatis. Echinatum. *Da Costa Brit. Conch. p. 176. Tab. 14. fig. 2.*

PLATE CVII.

Dead and worn Shells of this species are found on several of the British coasts in plenty.

It is an elegant shell though the colours are in general obscure: within it is white, without of a pale brown sometimes marked with transverse bands of rust colour.

FIG. II.

CARDIUM TUBERCULATUM.

TUBERCULATED COCKLE.

SPECIFIC CHARACTER

AND

SYNONYMS.

Shell somewhat heart-shaped, ribs obtuse, knotty, transversely striated.

CARDIUM TUBERCULATUM: testa subcordata: sulcis obtusis nodosis transversim striatis. *Linn. Gmel. Syst. T. I. p. 6. p. 3248. sp. 11.*

Gmelin mentions several varieties of this species. It has been sometimes considered as the *Cardium rusticum*.

Found on the coast of Dorsetshire, is scarce, and not before described as a British Shell.

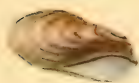


PLATE CVIII.

MYA DUBIA.

DUBIOUS MYA.

GENERIC CHARACTER.

Animal an ascidia. Shell bivalve, gaping at one end. The hinge for the most part furnished with a thick, strong, broad tooth, not inserted in the opposite valve.

SPECIFIC CHARACTER

AND

SYNONYMS.

Shell fragile, brown, bottom widely gaping ; rudiment of a tooth in one valve only.

MYA DUBIA : testa fragili fusca subtus valde hiantē valva una edentula altera rudimento dentis.

Mya dubia. *Penn. Br. Zool.* p. 82. 19.

Pennant, who seems to be the only author that describes this shell, says it has the rudiment of a tooth within one shell ; with an oval

PLATE CVIII.

and large hiatus opposite the hinge. Shells brown and brittle, size of a Pistachia nut. Length of a Horsebean, and found near Weymouth.

This Shell is rare, Pennant notes his from the Portland cabinet.

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ORDER 2.

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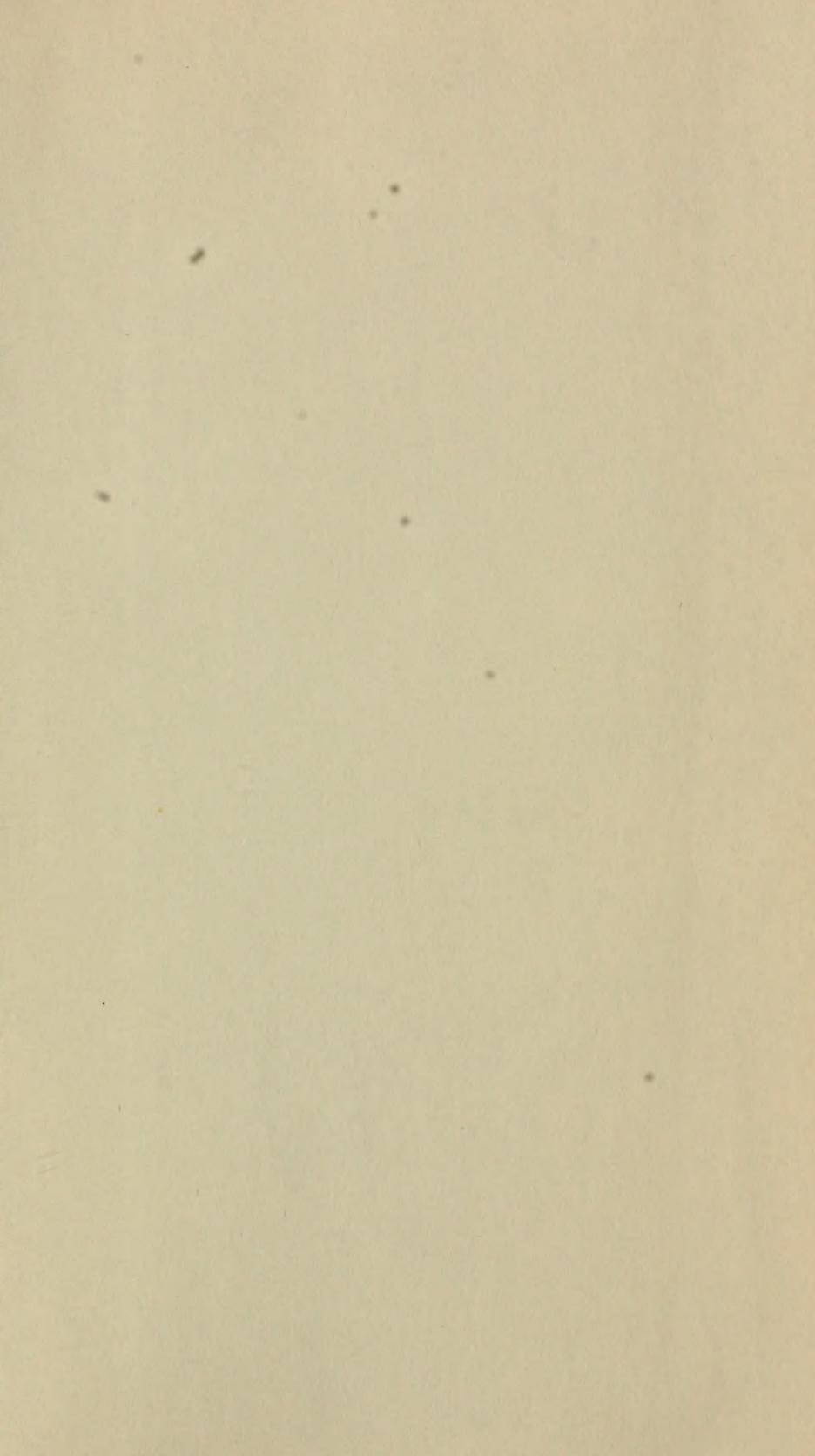
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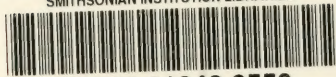
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